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# BEEF CARCASS INSPECTION PROGRAM

UNITED STATES DEPARTMENT OF AGRICULTURE  
CONSUMER AND MARKETING SERVICE  
MEAT AND POULTRY INSPECTION PROGRAM

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# **I Introduction**

**A) OBJECTIVES**

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**C) GLOSSARY**

## **A. OBJECTIVES OF THE INSPECTION PROGRAM**

This program continues the inspection process after completion of ante-mortem and post-mortem inspection. Its objectives are:

1. **WHOLESOMENESS** — to encourage the production, on a national scale, of clean meat and meat food products.
2. **UNIFORMITY** — to design, implement, and maintain an inspection procedure which includes nationally uniform sampling methods, defect standards, and product acceptance and rejection criteria.
3. **CONTROL** — to provide inspection personnel with a system of control which will assure that meat and meat food products, determined by the inspection criteria to be unclean, are withheld from commerce until they are made acceptable.
4. **INFORMATION** — to provide a continuous monitoring system for determining the extent and nature of defects found in meat and meat food products.
5. **FEEDBACK** — to provide management and inspectors with objective information to assist in determining the origins of dressing errors and other defects.



### B. COVERAGE

#### 1. *Types of plants covered.*

All cattle slaughter establishments killing 25 or more cattle per day shall be subject to this carcass inspection program.

This requirement is optional in plants which slaughter less than 25 cattle per day at the discretion of the Circuit Supervisor or Inspector-in-Charge. Should either elect to inspect by this method, the stationary sampling plan for 0 to 100 units may be used.

#### 2. *Types of beef carcasses covered.*

All beef carcasses are subject to this inspection program with one exception. Cattle carcasses destined for in-plant boning, and on which the regular boneless beef inspection will be conducted, are exempt from this beef carcass inspection, provided that these carcasses are properly segregated and identified to the inspector prior to inspection of sample units.

#### 3. *Types of defects covered.*

This beef carcass inspection procedure is designed to cover defects related to carcass cleanliness, such as:

- a. Those defects which are the responsibility of the establishment to clean or trim where the carcass is to be saved for human food.
- b. Other insanitary conditions resulting from handling, equipment, or facilities.

NOTE: The procedure is not designed to cover pathological conditions detectable by routine post-mortem inspection techniques.

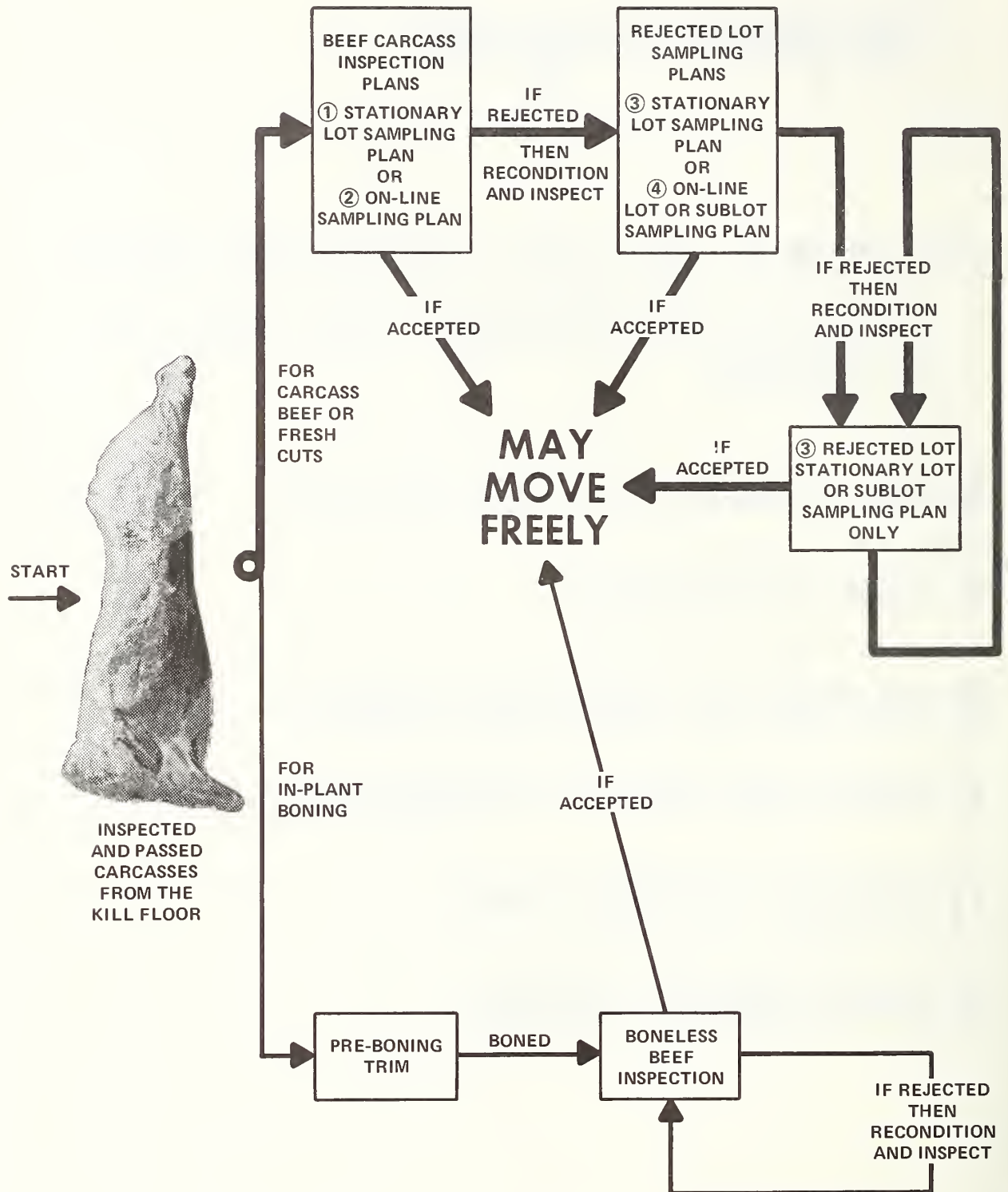
## C. GLOSSARY OF TERMS

Lot:	A lot is the number of half carcass units contained in the cooler, coolers, or other identified areas that are to be sampled and inspected.
Sublot:	A designated portion of a larger lot.
Sample Unit:	A sample unit is one-half (one side) of a carcass.
Sample Identification Point:	The sample identification point is the exact place or places where sample units are chosen and identified.
Sampling Inspection:	Sampling inspection is the process of measuring or otherwise comparing several sample units with the defect criteria to determine if the product meets requirements.
Random Sampling:	Random Sampling is the process of selecting sample units in such a manner that all units under consideration have the same probability of being selected.
Stationary Lot Sampling Plan:	In this plan the sample units selected at the sample identification point are collected at a designated area in the cooler and inspected at a later time, often the next day. On the basis of defects found in this sample the whole lot is either accepted or rejected and reconditioned.
On Line Sampling Plan:	In this plan the sample units selected at the sample identification point are examined immediately while hot, and the production represented by the sample accepted or rejected while the kill is in progress. If the sample unit group is rejected, then all units from the last accepted group to the next accepted group in the day's kill are rejected.

# **II Setting up the In-plant Program**

- A) DIAGRAM OF THE FLOW OF CARCASSES THROUGH  
THE INSPECTION PROCEDURES FROM SLAUGHTER  
TO SHIPPING**
- B) THE ESTABLISHMENT RESPONSIBILITY**
- C) SOME ALTERNATIVES**
- D) CHECKING THE INSPECTION RESULTS**
- E) INSPECTING REJECTED RECONDITIONED LOTS**
- F) REDUCED SAMPLING PLANS**
- G) PLANT CONTROL SYSTEMS**

A. DIAGRAM OF THE FLOW OF CARCASSES THROUGH THE INSPECTION PROCEDURES FROM SLAUGHTER TO SHIPPING

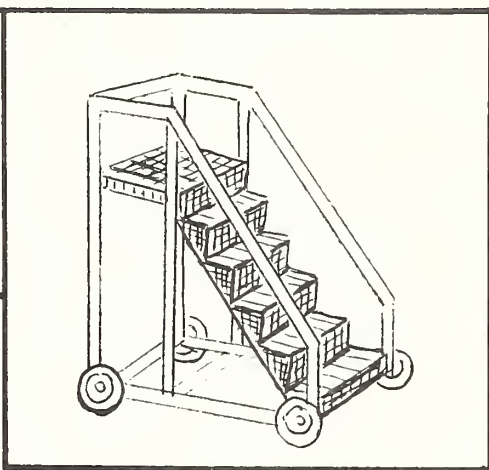
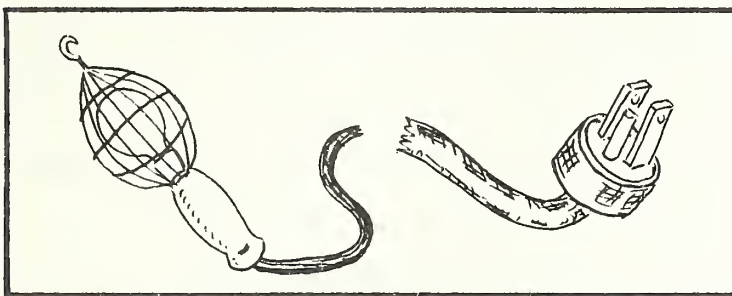


## B. ESTABLISHMENT RESPONSIBILITY

The establishment shall:

1. Provide a separate rail area for inspection.

2. Provide adequate, safe lighting. Light bulbs of not less than 60 watts shall be used and wiring must be properly grounded. There should be no less than 50 foot candles of light on the surface on the sample units being inspected.



3. Provide a safe platform, if one is needed. The platform must have a functional brake or self-locking wheels, and hand rails on the stairs and around the top platform. The sample units may be quartered and examined on a low rail if a safe platform is not available and plant facilities permit.

4. Provide tags or other adequate lot and sample identification devices.

5. Provide adequate help to aid the inspectors in inspecting the carcasses.

6. Instruct their employees as to their duties.

7. Group and maintain the identity of all lots such as rejected lots, passed lots, uninspected lots, lots destined for in-plant boning and so on, that are required to be kept functionally separate and individually identified as to lot. Individual carcass identification can be accomplished by dating or coding or some other means acceptable to the Circuit Supervisor. The lot identification system and any codes must be readily available to plant inspectors and employees so that the "status" of the lot (passed, rejected, not yet inspected, and so on) can be easily and quickly determined.

8. Segregate and maintain the identity of the carcasses which have been identified as sample sides. Shrouds should not be removed from the samples prior to the presence of an inspector on the premises.

9. Recondition rejected lots and maintain their identity until they are resampled, inspected, and passed.

10. Handle carcasses in such a manner that will insure a clean wholesome product.

11. Remove all observed critical and major defects before shipment.



## C. SOME ALTERNATIVES IN THESE INSPECTION PROCEDURES

The individual and unique characteristics of each plant must be considered to determine the most expedient inspection procedure consistent with the requirements. Some variables and constraints are outlined here to assist inspectors and plant managements in finding the most suitable procedure for their particular plants.

### 1. Lotting.

- a. Using the largest lots possible vs. breaking the kill down into many small lots. Large lots are most economical with both plant and inspection manpower, and tend to delay shipment the least if the carcasses are clean.
- b. Lotting on the basis of cattle type. (Considering steers, heifers, cows, and bulls each as a separate lot.) It should make no difference whether the cattle are inspected by type or as one lot, unless the establishment is not as careful when dressing some types as when dressing others. The sample sides indicate the quality of the plant's dressing procedures at the time the sample was identified on the kill floor. If the correct sanitary dressing procedures are followed, clean carcasses should be produced from all types of cattle.
- c. Lotting on the basis of established plant shipping, cutting, or fabricating schedules.

Because of their particular schedules, some plants may wish to call the morning kill a lot and have it inspected that same day, then call the afternoon kill another lot and have it inspected the following morning, or some such variation.

### 2. Identifying the Samples on the Kill Floor.

The actual method will vary with the kill floor layout and the workload of the inspectors. In some plants it is possible for the inspectors themselves to identify the sample units after washing and/or shrouding. Plants may devise systems (buzzers, bells, and such, with which the inspector can indicate to an establishment employee working in the identification area (after all washing and/or shrouding) which carcass to identify as a sample. IN NO CASE MAY ANY ESTABLISHMENT EMPLOYEE HAVE KNOWLEDGE OF THE SAMPLE IDENTIFICATION TIMES BEFORE THE SAMPLE CARCASSES REACH THE SAMPLE IDENTIFICATION POINT ON THE KILL FLOOR.

### 3. On-Line vs. Stationary Lot Sampling

In on-line sampling the carcasses may be shipped from the establishment soon after leaving the sample identification point if the sample groups are accepted. In addition, this plan allows immediate correction of cause of noted defects, and, in case of rejection, a smaller number of carcasses is involved in the reconditioning.

Stationary lot sampling plans allow more flexibility in scheduling the inspections and may be advantageous if kill floor facilities for this type inspection are limited. Plant managers are encouraged to contact their Circuit Supervisor for more information regarding this choice.

### 4. Quarter Inspection vs. Half Carcass Inspection.

Facilities will be the main determining factor in deciding whether to perform the inspection on quarters or halves. If the sample units are quartered, the forequarter and the hindquarter from each unit must be identified as part of the sample from the lot, but they do not have to be inspected together. The order of examining the sample units does not matter as long as each individual unit is examined thoroughly according to the standard inspection procedure.



#### D. CHECKPOINTS FOR INSPECTION RESULTS

1. Are lots and sample sides identified?
2. Is inspection being performed at the designated area?
3. Are only safe platforms and lights being used?
4. Are sample sides being selected at random?
5. Are the sample sides being correctly identified on the kill floor?
6. Are the defect interpretations being made according to the inspection criteria?
7. Is defect data being recorded correctly on CP 519, and is lot data being recorded correctly on CP 520?
8. Are these forms being completed, filed, and distributed correctly?
9. Is the information on defects being used to assist management in identifying and correcting inadequate sanitary dressing procedures?

## E. INSPECTING REJECTED RECONDITIONED LOTS

Rejected lots must be inspected and accepted before being released for shipment or use within the plant. The Rejected Lot Sampling Plans (Plans 3 and 4 on the diagram, page 8) are used to determine the acceptability of these lots. There are both On-Line and Stationary Lot Rejected Lot sampling plans, and both contain provisions for dividing large lots to expedite the reconditioning process.

If the Rejected Lot On-Line Sampling Plan is used and any one sample group is rejected, then the available carcasses in the lot from the last acceptable sample group must be rejected. The inspector in charge will determine how much of the rejected lot must be reconditioned before another sample group is selected. When such a group has been selected with his agreement, and the group is accepted, the on-line conditioning may be resumed. As an alternative, the remaining rejected lot may be divided into suitable sublots and further reconditioning and inspection conducted by use of the Stationary Lot Rejected Lot Sampling Plan.

## F. REDUCED SAMPLING PLANS

An assumption basic to statistical sampling is that once people have established the ability to do a job correctly and achieve acceptable results, they are likely to continue to do that job correctly and achieve acceptable results as long as conditions remain essentially the same. Therefore, once a plant has demonstrated its ability to continuously produce acceptable lots, inspection assumes that it will continue to do so as long as conditions affecting the production of the carcasses are not significantly altered.

To expedite the inspection process for plants which have demonstrated this ability, reduced sampling plans are being developed in which only a portion of the lots are sampled instead of all of them. Circuit Supervisors will have further information for interested plant managers.

## G. PLANT CONTROL SYSTEMS

Establishments are encouraged to utilize their own employees to perform this beef carcass inspection procedure. By thus discovering and correcting conditions that might lead to retention of carcasses by USDA inspectors, plants should be able to meet a wide range of shipping schedules. It is expected that the plant system would provide for warning limits to allow adjustments to be made during production so that monitoring by USDA inspectors would not result in USDA rejections. The control system must be formalized in writing and submitted for approval to Standards and Services Division, Meat and Poultry Inspection.

An approved plant system would contain the following elements:

- (1) Actual process supervision and control during operations.
- (2) On line inspection utilizing acceptance and rejection criteria that are at least as restrictive as the U.S.D.A. beef carcass inspection criteria.
- (3) Definite actions such as segregation and reconditioning of lots and/or portions of production that fail the establishment acceptance criteria.

# **III Carrying out this Inspection Procedure**

Two basic inspection procedures were developed in order to achieve as much production and inspection flexibility as possible while using a minimum number of establishment and inspection personnel. The two procedures are:

- A. The Stationary Lot Sampling Plans, and
- B. The On-Line Sampling Plans.

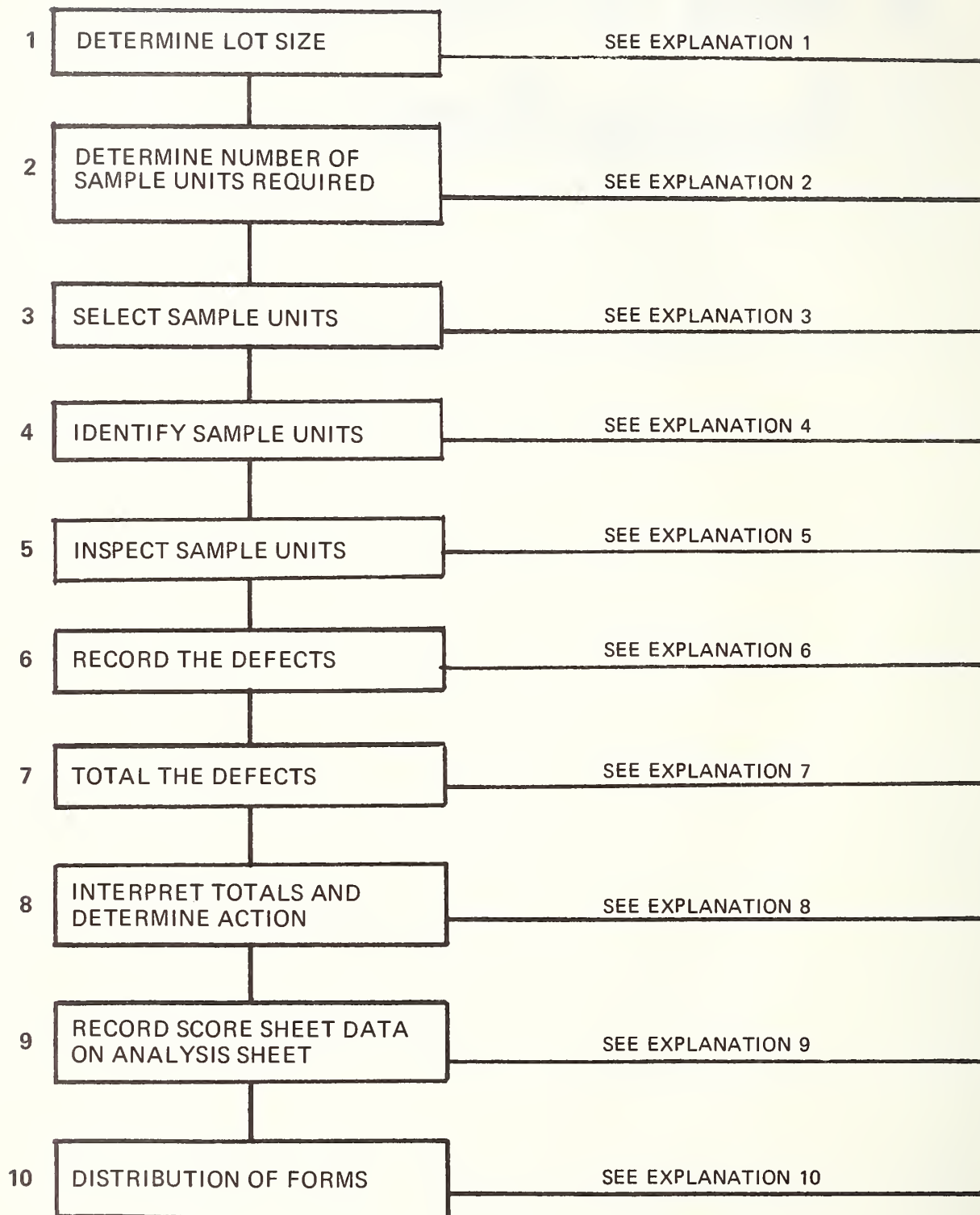
In the Stationary Lot Sampling Plans, the sample units, selected individually at the sample identification point are collected at a designated area in the cooler and reinspected at a later time, often the next day. In the On-Line Sampling Plans the sample units, selected in groups of 3 at the sample identification point, are inspected while hot. With mutual agreement between the plant management and the Circuit Supervisor, either procedure may be used on any lot.

The procedure for carrying out Stationary Lot inspections begins on the next page.

For an explanation of the On-Line procedure, turn to page 54.

# **A- Using the Stationary Lot Sampling Plans**

BEEF CARCASS INSPECTION PROCEDURE CHART FOR THE  
STATIONARY LOT SAMPLING PLANS





# EXPLANATION 1 - STATIONARY LOT SAMPLING PLANS

## What Is A Lot?

### A Lot Is-----

- a) the contents of one or several chill coolers.
- b) the entire days kill.
- c) other units mutually acceptable to both the Circuit Supervisor and the plant management.

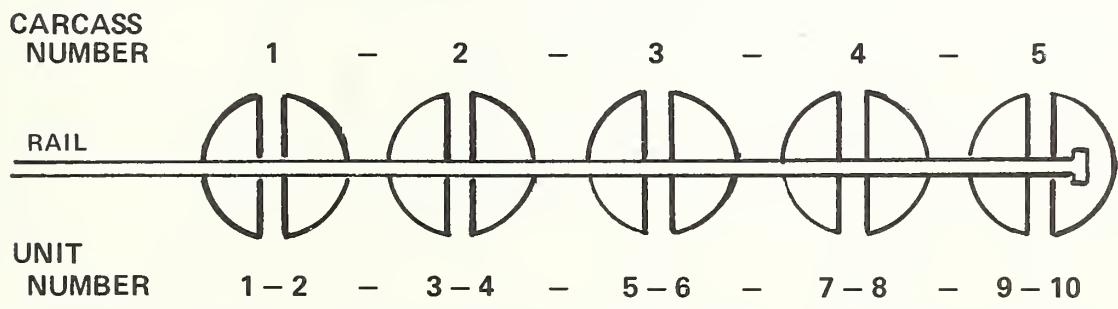
### The Lot Size---

— — — is counted in HALF-CARCASS UNITS.

EACH CARCASS IS TWO UNITS—a left half and a right half.

Therefore: the lot size for 100 cattle would be 200 units (sides).

### EXAMPLE



THE LOT SIZE ILLUSTRATED IS 10 HALF-CARCASS UNITS.

# EXPLANATION 2 - STATIONARY LOT SAMPLING PLANS

## Determining the number of sample times-of-day required

*First*—Select the correct sampling plan chart for the inspection method being used.

*Then*—Determine the required sample size in half-carass units from the Sampling Plan chart beside the appropriate lot size.

STATIONARY LOT SAMPLING PLANS

Lot Size (Sides)	Plan	Sample Size (Sides)	Critical		Major		Total	
			Ac	Re	Ac	Re	Ac	Re
100 or less	Single	3	1	2	4	5	12	13
100 - 250	Double							
	Step 1	4	0	3	3	7	12	17
	Step 2	3						
	<b>Total</b>	7	2	3	8	9	24	25
251 - 500	Double							
	Step 1	7	1	5	4	10	18	28
	Step 2	7						
	<b>Total</b>	14	4	5	14	15	45	46
501 and up	Double							
	Step 1	10	1	6	6	13	26	37
	Step 2	12						
	<b>Total</b>	22	6	7	21	22	68	69

If the lot size is 101 to 250 units (sides), then the total sample size is 7 sides of beef.

For a lot size of 251 to 500 sides, the total sample size is 14 sides of beef. (Remember that the lot size is determined in *sides*. A common error at this point is to figure the total sample size on the basis of carcasses, not *sides*.)

# EXPLANATION 3 - 1 - STATIONARY LOT SAMPLING PLANS

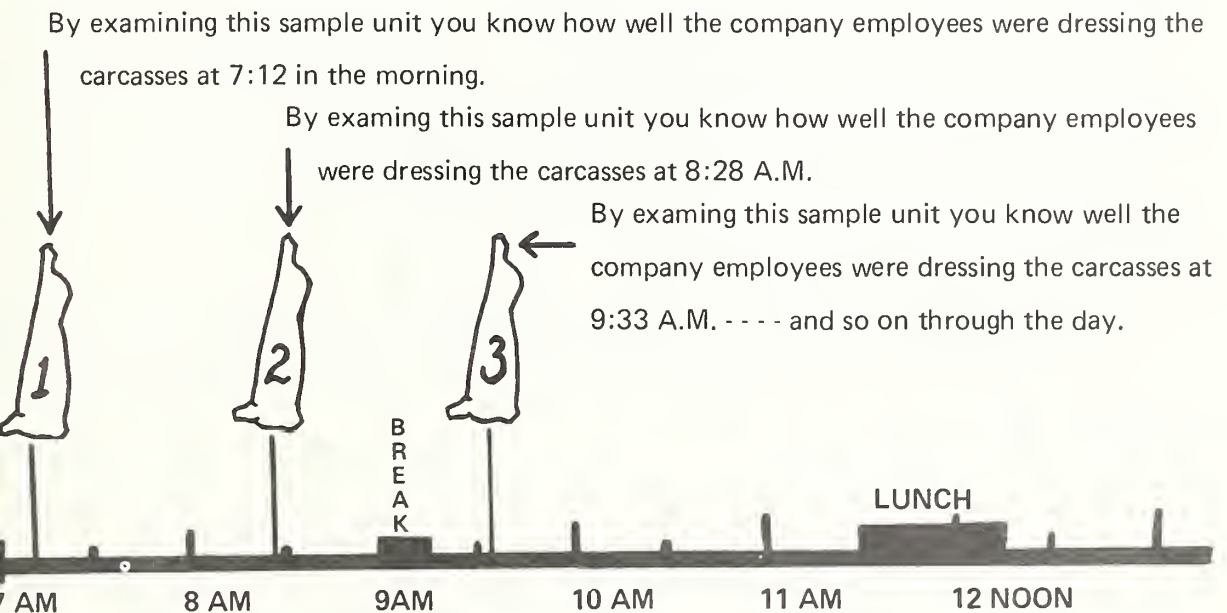
## SELECTION OF SAMPLE UNITS

### Random Cards

Attempts at random selection with no aids such as random tables are usually unsuccessful because of the often unconscious desire of people to form habits and routines, which others are frequently able to detect. The Random Cards are designed to assist the inspector in selecting sample units with a minimum of predictability.

When you examine a particular sample unit, you are actually evaluating how well the company employees were dressing the carcasses on the kill floor at the time the sample was identified.

For example —



## EXPLANATION 3 (2) STATIONARY LOT SAMPLING PLANS

We may be able to determine why certain carcasses have more defects than others by relating the numbers and types of defects to the time of day. For example, maybe the sample unit pulled at 10:58 a.m. has many defects and a check shows that most of the samples identified about this time have more defects than the others. It turns out that this is right before lunch and the plant employees are in a hurry to get away. Or, perhaps, the samples identified on the afternoon of a particular day showed an unusual amount of hair and dirt. A check with the kill floor inspectors reveal that the hide puller broke down yesterday afternoon when the samples were identified. Now the inspectors and plant foremen will know what to watch for if the hide puller breaks down again, and more uniformly clean carcasses will result.

The Random Cards were developed to help inspectors achieve the randomness necessary to prevent "second-guessing."

Each Random Card is different and consists of three columns of random numbers to the left and twelve columns of twenty-five random times of day to the right. To demonstrate their use, an example has been set up on the following pages. First is a marked Random Card for a lot size of 450 sides. Under it are listed briefly the eight steps for choosing the random times needed. A detailed explanation of each of the eight steps follows the brief listing.

NOTE — *In the example, the procedures will be marked on the sample Random Card for clarity and to save space. You should copy your data on a separate piece of paper so as not to unnecessarily mutilate your Random Cards.*

# EXPLANATION 3 (3) STATIONARY LOT SAMPLING PLANS

## THE SAMPLE RANDOM CARD -with the example marked

BEEF CARCASS SAMPLING															
RANDOM NO.			RANDOM TIMES												
9	17	20	700	804	900	1000	1103	1201	100	200	300	403	500	601	
35	27	53	703	805	900	1001	1104	1203	101	203	302	403	506	603	
8	52	20	705	807	901	1004	1107	1204	105	207	304	405	509	603	
51	45	12	709	809	904	1005	1107	1204	105	212	304	405	510	606	
9	17	15	710	812	904	1005	1108	1204	110	214	305	405	512	606	
68	12	5													
8	50	17	712	816	915	1006	1112	1209	111	218	308	411	512	608	
64	20	26	714	817	923	1008	1115	1210	118	219	319	413	517	611	
47	44	45	715	820	924	1013	1115	1210	120	219	320	413	518	616	
11	7	10	715	821	925	1016	1115	1211	121	220	321	414	524	617	
68	36	19	721	826	927	1019	1116	1212	122	226	323	415	524	618	
58	26	49													
64	3	60	721	829	928	1029	1116	1214	125	227	325	416	526	619	
53	52	37	724	829	929	1029	1117	1217	126	228	326	419	529	622	
28	38	45	727	830	932	1029	1124	1223	129	229	328	423	533	624	
66	52	62	727	831	933	1052	1130	1228	134	235	329	423	540	625	
41	36	50	727	833	934	1034	1131	1229	136	237	330	427	542	625	
53	17	36													
42	8	19	729	834	935	1035	1132	1229	139	238	334	428	543	626	
37	50	35	735	835	938	1041	1134	1231	139	238	334	429	543	628	
29	66	61	735	836	942	1048	1135	1235	145	239	335	444	543	629	
47	9	39	736	838	945	1051	1139	1240	145	241	337	444	544	633	
17	23	56	741	840	945	1052	1140	1241	149	241	340	447	546	636	
62	50	9													
55	33	40	742	854	945	1052	1143	1244	150	244	340	447	547	641	
13	60	39	745	855	947	1057	1152	1246	152	252	341	452	551	641	
36	66	6	752	857	952	1057	1152	1246	152	256	350	456	553	652	
57	13	41	757	857	955	1058	1154	1251	153	259	351	457	555	659	
83	4	6	759	858	959	1059	1157	1252	158	259	359	458	556	659	

4 + 25 + 20 + 25 + 10 + 25 + 25 + 20 + 25 + 9 = 188 (3)

Below are listed the 8 steps for using the Random Cards. For a more detailed explanation of each step, turn to the following pages.

- Step ① Blindly pick a Random Card.
- Step ② Block off all the times-of-day during which carcasses are not flowing past the kill floor identification point.
- Step ③ Total the number of times-of-day during which carcasses do flow past the kill floor identification point.
- Step ④ Determine the number of sample sides which must be identified on the kill floor - 14 for this example.
- Step ⑤ Figure the SAMPLING INTERVAL  $\frac{188}{14} = 13$  (Drop all fractions).
- Step ⑥ Randomly select a starting point, number must be equal to or less than sampling interval in ⑤.
- Step ⑦ Select the required number of times-of-day.
- Step ⑧ Eliminate extra sample units, if necessary.

# EXPLANATION 3 (4) STATIONARY LOT SAMPLING PLANS

## SELECTION PROCEDURE

- Step 1. *Shuffle the Random Cards and blindly pick one.* This is the card to be used for all sampling for this particular day. Randomly pick a different card for each day that you sample.
- Step 2. *Block off all the times-of-day during which your kill is not operating - morning breaks, lunch, afternoon breaks, and so on.* You cannot, of course, pick a sample at a particular time if you are not killing at that time. Therefore, you must eliminate from consideration all times-of-day during which carcasses are not moving past the point at which you identify them in the inspection procedure; carcasses are identified after shrouding and/or washing, so you must block off all times-of-day during which carcasses are not flowing past this kill floor identification point.

### For This Example —

Bleeding begins at 7:00 a.m., first carcass shrouded and at the kill floor identification point at 7:45 a.m. Morning break at identification point - 9:00 to 9:15 a.m. Lunch break at identification point - 11:15 to 11:45 a.m. Afternoon break at identification point - 2:00 to 2:15 p.m. Finished at identification point - 4:15 p.m.

See the sample Random Card on the previous page showing the above times-of-day blocked off.



## EXPLANATION 3 (5) STATIONARY LOT SAMPLING PLANS

- Step 3. *Total up the number of times-of-day applicable to your kill.* These are all the times-of-day during which carcasses are actually flowing past the point on the kill floor at which the samples are identified. The times of day are arranged in groups of five and in columns of 25 for easy counting. FOLLOW THIS STEP OF THE EXAMPLE ON THE SAMPLE RANDOM CARD ON PAGE 3 OF THIS EXPLANATION.
- Step 4. *Select the number of samples which must be identified on the kill floor.* This is the number selected from the STATIONARY LOT SAMPLING PLANS chart in Explanation 2, p. 20. In this example, for a 450 side lot size, a total of 14 sides must be identified.

## EXPLANATION 3 (6) STATIONARY LOT SAMPLING PLANS

Step 5. *Figure the SAMPLING INTERVAL for your particular kill using this particular RANDOM CARD.* In order to assure that the samples are selected at fairly even intervals throughout the kill but not at any specific time (such as on the half hour), a SAMPLING INTERVAL is needed. Otherwise, there is a good possibility that many samples would be selected at one particular time, such as the beginning, or middle, or end of the kill.

TO FIGURE YOUR PARTICULAR SAMPLING INTERVAL, DIVIDE THE NUMBER OF SAMPLES WHICH MUST BE IDENTIFIED ON THE KILL FLOOR INTO THE TOTAL NUMBER OF APPLICABLE TIMES-OF-DAY.

$$\frac{\text{TOTAL TIMES-OF-DAY}}{\text{NUMBER OF SAMPLES TO BE IDENTIFIED}} = \text{SAMPLING INTERVAL}$$

$$\begin{array}{l} \text{FOLLOWING} \\ \text{THE EXAMPLE} \end{array} \quad \frac{188}{14} = 13 \text{ (drop all fractions)}$$

THE SAMPLING INTERVAL FOR THIS EXAMPLE IS 13.

If every thirteenth time-of-day on the chart is selected as a sample identification time, then the samples will be selected throughout the kill but no one will be able to predict exactly when any sample will actually be identified.



# EXPLANATION 3 (7) STATIONARY LOT SAMPLING PLANS

Step 6. *Randomly select a starting point.*

Blindly place your pencil somewhere on the three columns of random numbers to the left of your Random Card. The number must be smaller than the sampling interval number. If the number under your pencil is too big then move your pencil up or down the column at random until you come to the first number within your sampling interval. This number represents the time-of-day to identify sample #1 on the kill floor. If you choose a number larger than your sampling interval number as your starting point then you may run out of applicable times-of-day on the Random Card before you have selected enough times for the required number of samples.

### Example

You blindly put your pencil on the random number columns and hit #52. You decide to move down and the first number smaller than your sampling interval number (between 0 and 13) is 12. So you identify your first sample carcass at the kill floor identification point at the twelfth applicable time-of-day, 8:20 a.m. FOLLOW THIS EXAMPLE ON THE SAMPLE RANDOM CARD ON PAGE 23.

## EXPLANATION 3 (8) STATIONARY LOT SAMPLING PLANS

Step 7. *Select the required number of times-of-day needed to identify the required number of samples.*

Start counting from the next applicable time of day past Sample #1 and select every sampling interval time as a sample identification time.

In this example, you would select every 13th time. SEE THE SAMPLE RANDOM CARD ON PAGE 23. You may find that you have an extra sample time-of-day at the end of the chart (14 instead of 13). DO SELECT THIS AS A SAMPLE TIME-OF-DAY. If you do not, then the probability of selecting a sample from the last carcasses of the day drops to zero, and the last carcasses may have some defects.

Step 8. *If necessary, eliminate extra sample units.*

To eliminate extra sample units before inspection of carcasses, again use the three random number columns to the left of the Random Cards. Blindly place your pencil down on the columns, move up or down, and pick the first applicable numbers between 1 and the total number of samples. Eliminate excess sides corresponding to the numbers picked.

Using the same system with the random number columns, you can pick the sample units to be examined in the first step of the Double Sampling Plan. Blindly place your pencil on the columns, move up or down at random, and pick the first applicable numbers between 1 and the total number of sample sides until you have the required amount for the first step inspection.

# EXPLANATION 4 - STATIONARY LOT SAMPLING PLANS

## Kill Floor Identification of Sample Units

Since kill floor layouts and inspector workloads vary from plant to plant, there is no single best way to identify the sample units on the kill floor.

When each sample unit identification time arrives, the designated inspector will identify the carcass closest to the kill floor identification point as a sample.

Sample units must not be identified until all plant washing and cleaning procedures are completed, or after shrouding, if shrouds are used.

The preselected random times-of-day for the actual identification of the specific sample units should be known only by the inspector selecting the samples.

The sample unit identification device should be different from other identification devices used by the plant. It should be placed on the carcass so that it can be easily seen, and should be fastened as securely as possible.

# EXPLANATION 5 (1) STATIONARY LOT SAMPLING PLANS

## Inspection of the Sample Units

*First* - determine how many sample sides to initially inspect.

*Then* - inspect according to the inspection routine.

### HOW MANY TO INSPECT?

a) SINGLE SAMPLING PLAN—examine all selected sample units. This SINGLE SAMPLING PLAN is used for small lots (100 sides or less) only.

b) DOUBLE SAMPLING PLAN—initially examine only the number of sample units indicated on the Sampling Plan chart for DOUBLE SAMPLING PLAN - STEP 1 - check to be sure you use the appropriate lot size. Pick these FIRST STEP sample units at random using the Random Cards. (See Explanation 8 p. 30.) Inspect the remainder if the second step is necessary.

### STATIONARY LOT SAMPLING PLANS

Lot Size (Sides)	Plan	Sample Size (Sides)	Critical		Major		Total	
			Ac	Re	Ac	Re	Ac	Re
100 or less	Single	3	1	2	4	5	12	13
100 - 250	Double Step 1	4	0	3	3	7	12	17
	Step 2	3						
	Total	7	2	3	8	9	24	25
251 - 500	Double Step 1	7	1	5	4	10	18	28
	Step 2	7						
	Total	14	4	5	14	15	45	46
501 and up	Double Step 1	10	1	6	6	13	26	37
	Step 2	12						
	Total	22	6	7	21	22	68	69

# EXPLANATION 5 (2) STATIONARY LOT SAMPLING PLANS

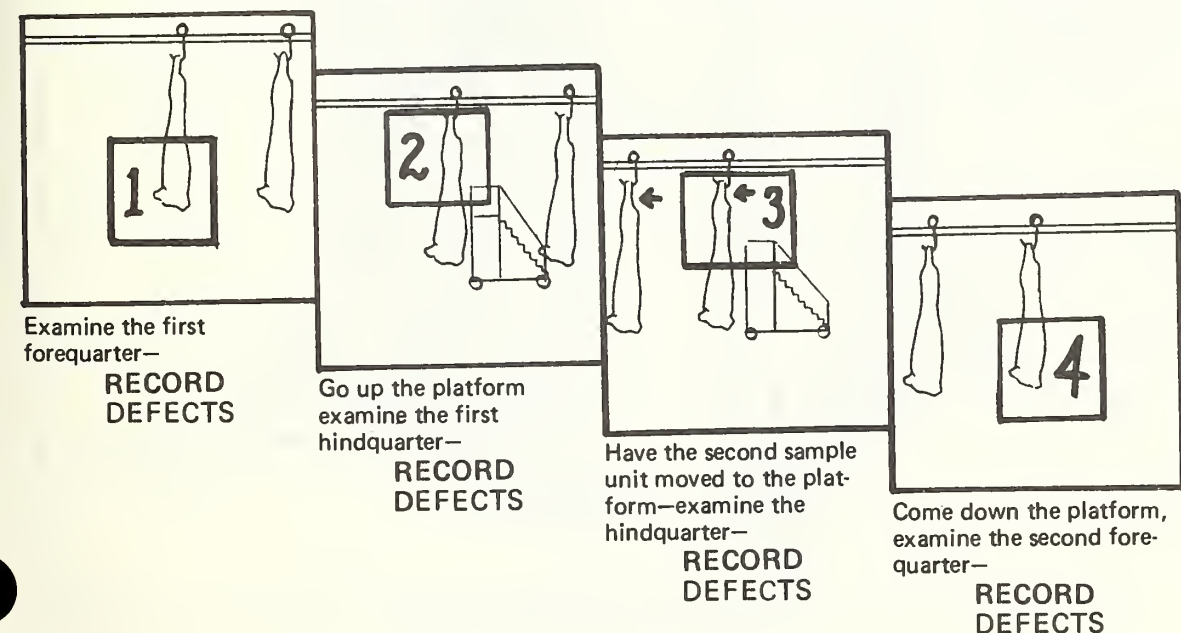
## Inspection of the Sample Units

### INSPECTION ROUTINE

An inspection routine has been developed to avoid the inadvertent overlooking of any carcass areas or defects. Measured work standards show the average maximum time required for inspecting a unit is 2 minutes. To promote uniformity of inspection and efficient use of manpower, this upper time limit should be observed except in unusual cases.

The half-carcass sample units are examined in groups of two. First inspect the forequarter of the first half-then record the defects. Then go up the platform, examine the first hindquarter-then record the defects. Have the plant employee push the second unit over to the platform, examine the hindquarter, then record the defects. Come down the platform, examine the second forequarter, then record the defects. Repeat the examinations in groups of two until all the units have been inspected and recorded. Avoid backtracking to avoid recording the same defect more than one time only.

Do not try to remember the defects too long. Record more often if necessary. Suggestion: Record the defects on a piece of paper and transfer to CP 519 after completion of inspection.





# EXPLANATION 5 (3) STATIONARY LOT SAMPLING PLANS

## Inspection of the Individual Carcass Units

★ 1 IS THE STARTING POINT FOR INSPECTION OF THE FOREQUARTER

★ 2 IS THE STARTING POINT FOR INSPECTION OF THE HINDQUARTER

RECORD AGAIN

— then to the hock of the next unit in the group of two.

ONE CARCASS UNIT  
OUTSIDE  
INSIDE

(SWING  
CARCASS  
AROUND)

START  
HERE

RECORD—then up platform to hock.

# EXPLANATION 5 (4) STATIONARY LOT SAMPLING PLANS

## Beef Carcass Inspection Routine

PART	AREAS INCLUDED	SOME COMMON DEFECTS
FOREQUARTER —INSIDE	DIAPHRAGM, THORAX, CUT SURFACE OR SPINE, NECK, JUGULAR GROOVE, BRISKET, INNER FORE- ARM, END OF SHANK	HAIR, HIDE, GREASE, STAINS, BLOOD CLOTS, BRUISES, BROKEN RIBS, INGESTA, PIECES OF TRA- CHEA, PIECES OF LUNG,
FOREQUARTER —OUTSIDE	PLATE, RIBS, CHUCK, NECK, BRISKET, FORE SHANK.	HAIR, HIDE, GREASE, STAINS, BRUISES, GRUBS,
HINDQUARTER —INSIDE	HOCK, HOOK HOLE, SHANK, INSIDE ROUND, AITCH BONE, PELVIC CANAL, CUT SURFACE OF SPINE, COD FAT, LUMBAR AREA, AB- DOMINAL SURFACES, KID- NEY, HANGING TENDER.	HAIR, HIDE, GREASE, RUST, BRUISES, PIZZLE, RECTAL MUCOSA, FECES, BLOOD CLOTS, PIECES OF LIVER, OVARIES, UDDER FRAG- MENTS,
HINDQUARTER —OUTSIDE	HOCK, SHANK, HOOK HOLE, ROUND, TAIL AREA, BACK, FLANK.	RUST, GREASE, HAIR, HIDE, BRUISES, FECES, GRUBS.

# EXPLANATION 6 (1) STATIONARY LOT SAMPLING PLANS

## RECORDING THE DEFECTS

Each defect commonly found on cattle carcasses is listed in the Carcass Defect Criteria chart under Defect Description.

Each defect is broken down further into DEFECT CLASS - which reflects the effect of the defect on the appearance or usability of the product.

### CARCASS DEFECT CRITERIA

Defect Description	Defect Class
--------------------	--------------

*Hair Per Sample Unit:*

(a) Hock Area Only:

10 hairs or less scattered over both sides of the hock ----- Do not score  
11-25 hairs scattered over both sides of the hock ----- Minor

NOTE: Hairs too numerous to count should be considered as a cluster. If both sides of hock are affected, count as two clusters. Clusters on hock *are to be* accumulated with clusters found on remainder of half carcass. Scattered hairs on the hock ARE NOT to be accumulated with hairs found on remainder of half carcass.

(b) Other Than Hock Area:

10 or less scattered over half carcass ----- Do not score  
11-25 hairs ----- Minor  
26-50 ----- Major  
More than 50 hairs ----- Critical

NOTE: Numerous hairs in a 5 inch area score as a cluster.



# STATIONARY LOT SAMPLING PLANS EXPLANATION 6(2)

## CARCASS DEFECT CRITERIA (CONTINUED)

Defect Description	Defect Class
<i>Hair Clusters Per Sample Unit:</i>	
1-2 clusters- -----	Minor
3-4 clusters- -----	Major
5 or more clusters- -----	Critical
<i>Hide:</i>	
Pieces less than 1/2 inch in any dimension- -----	Minor
Pieces 1/2 inch up to and including 3 inches in any dimension- -----	Major
Pieces over 3 inches in any dimension- -----	Critical
<i>Bruises - Injuries: Per Sample Unit:</i>	
2 inches or less in any dimension and 1 inch or less deep- -----	Insignificant
More than 2 inches in any dimension and 1 inch or less deep- -----	Minor
2 inches or less in all dimensions and more than 1 inch deep- -----	Minor
More than 2 inches in any dimension and more than 1 inch deep- -----	Major
<i>Oil, Stains or Grease: Per Sample Unit:</i>	
Less than 2 inches in greatest dimension- -----	Minor
2 inches or more in greatest dimension- -----	Major
NOTE: Any drops or streaks of oil or grease on the tendinous part of the hock area will be scored as a minor defect.	
<i>Rail Dust or Other Similar Specks: Per Sample Unit:</i>	
10 or less scattered specks- -----	Do not score
11-25 scattered specks- -----	Minor
26 or more scattered- -----	Major
NOTE: Do not score spots of edible ink as specks.	

# EXPLANATION 6(3) STATIONARY LOT SAMPLING PLANS

Defect Description	Defect Class
<i>Dressing Defects: Per Sample Unit:</i>	
Less than 1/4 inch- - - - -	Score as specks
1/4 inch up to and including 2 inches- - - - -	Minor
Over 2 inches up to and including 4 inches- - - - -	Major
Over 4 inches - - - - -	Critical
<i>Improper Trim:</i>	
Pieces of organs, large clots in improper stick wounds, etc. - - - - -	Minor
<i>Parasites:</i>	
1 grub - - - - -	Minor
2-3 grubs- - - - -	Major
4 or more grubs- - - - -	Critical
<i>Other: Use the class guidelines below.</i>	
Any defect that individually or in aggregate does not affect usability of product but does affect product appearance- - - - -	Minor
Any defect that individually or in aggregate materially affects product usability (specify on scoresheet) - - - - -	Major
Any defect that individually or in aggregate seriously affects appearance and usability of product (specify on scoresheet) - - - - -	Critical
<i>Pathology (Not to include broken rib, grubs, etc.) - - - - -</i>	Retain and Notify Supervisor

\*NOTE: When glass or metal fragments are found on samples, the inspector in charge should take whatever action he determines to be appropriate. The lot should not be rejected if only isolated carcasses are involved.

# EXPLANATION 6 (4) STATIONARY LOT SAMPLING PLANS

## RECORDING THE DEFECTS

In the "do not score" class are defects which have a negligible effect on the appearance and usability of the product.

In the "minor" class are defects which do affect product appearance, but do not affect the usability.

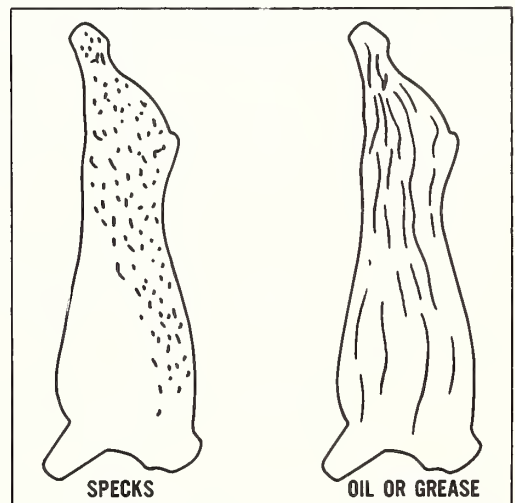
In the "major" class are defects which affect both the appearance and the usability of the product.

A defect more extensive than "major" would go in the "critical" class.

An "other" defect category is included for less common defects. The class guidelines are included in this category. The identity of any defect scored as a major or a critical in the "other" category should be specified on the scoresheet.

Below are some examples of defects evaluated using class guidelines.

1) Rust specks, or grease which is *well distributed over more than one quarter* of the surface area of the sample unit, seriously affects the appearance and usability of the product, and should be recorded as a *critical* defect. See diagram. Record these under "other" "critical" and specify the defect on the scoresheet. The "Oil, Stains, and Grease" defect criteria and the "Rail Dust or other Similar Specks" defect criteria do not have a "critical" class. Therefore, they must be recorded in the "Other" category when critical defects occur.

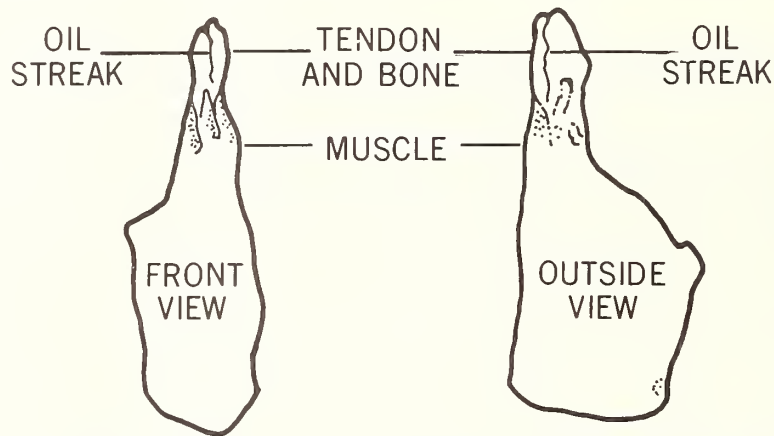


## EXPLANATION 6 (5) STATIONARY LOT SAMPLING PLANS

2) Dressing defects include dirt, fecal material, and ingesta. They are all in one defect category to promote more uniformity in classifying defects.

3) Numerous hairs (approximately 10 or more) in about a five inch area should be classed as a cluster.

4) A drop of oil on the hock may become a streak by the time the sample unit is inspected. If the oil streak is confined to the tendinous portion of the hock only it should be classified as a minor defect.



5) If the oil streak affects the carcass beyond the tendinous hock, it should be recorded according to the regular oil, stain, or grease criteria.

# EXPLANATION 6 (6) STATIONARY LOT SAMPLING PLANS

## Recording the Defects

## Form CP 519 - AQL SCORE SHEET

**FIRST** — Fill out the top.

FORM CP-519 (2-2-70)		USDA - C&MS CONSUMER PROTECTION PROGRAMS		ESTABLISHMENT NO. <b>1</b>		DATE <b>2</b>	
<b>AQL SCORE SHEET</b>							
PRODUCT <b>3</b>	PRODUCT CODE <b>4</b>	LOT NO. <b>5</b>	LOT SIZE <b>6</b>	SAMPLING PLAN DOUBLE 1st step 2nd step <b>1</b> <b>2</b>		SINGLE <b>7</b> <b>3</b>	
REINSPECTION OF A REJECTED LOT <b>1</b> YES <b>2</b> NO <b>9</b>		BOXED PRODUCT <b>1</b> YES <b>2</b> NO <b>10</b>		LOT ACCEPTED <b>1</b>		LOT REJECTED <b>2</b>	
DEFECTS		<b>1</b> MINOR DEFECTS (Number)		<b>2</b> MAJOR DEFECTS (Number)		<b>3</b> CRITICAL DEFECTS (Number)	
		1st step	2nd step	1st step	2nd step	1st step	2nd step
Hair							

- 1** Establishment number at which the inspection is conducted.
- 2** Date on which the inspection is conducted.
- 3** Product — BEEF CARCASSES
- 4** Product code — 001
- 5** Lot number
- 6** Lot size — STATIONARY LOT SAMPLING PLANS — record the number of *sides* — half-carcass units — in the lot. (Be careful *not* to record the number of carcasses — this is a common error.)
- 7** Sampling plan — STATIONARY LOT SAMPLING PLANS

*SINGLE* — checkmark the appropriate box. (Use only for lots of 100 or less sides.)

*DOUBLE* — if *only* the FIRST STEP sample sides are inspected then checkmark "1st Step" box.

— if *both* the FIRST and SECOND step sample units are inspected then checkmark *both* the "1st Step" and "2nd Step" boxes.

# EXPLANATION 6 (7) STATIONARY LOT SAMPLING PLANS

## 8 Sample size — STATIONARY LOT SAMPLING PLANS

*SINGLE* — enter the total number of sample sides inspected.

EXAMPLE

SAMPLING PLAN			SAMPLE SIZE
<b>DOUBLE</b>		<b>SINGLE</b>	3
1st step	2nd step		
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	

*DOUBLE* — if the FIRST STEP only is inspected, enter the number of FIRST STEP sample units examined.

EXAMPLE — Lot size — 450 sides.

SAMPLING PLAN			SAMPLE SIZE
<b>DOUBLE</b>		<b>SINGLE</b>	7
1st step	2nd step		
1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	

— if *both* the FIRST and SECOND steps are inspected, enter both the FIRST STEP number and the TOTAL number of of sample sides as follows (Lot Size 450 sides)

SAMPLING PLAN			SAMPLE SIZE
<b>DOUBLE</b>		<b>SINGLE</b>	7/14
1st step	2nd step		
1 <input checked="" type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	

9 Inspection of rejected lot — checkmark the appropriate box.

10 Boxed product — checkmark appropriate box.



# EXPLANATION 6 (8) STATIONARY LOT SAMPLING PLANS

**SECOND** – After filling out the top of the form, evaluate each defect found on the sample units according to the CARCASS DEFECT CRITERIA chart.

**THIRD** – Tally each defect on the scoresheet beside the applicable defect name and under the applicable class (minor, major, or critical) and step (1st step or 2nd step).

*SINGLE SAMPLING PLAN* – record defects in the proper column (minor, major, or critical) under *the first step only*.

DEFECTS	1 MINOR DEFECTS (Number)		2 MAJOR DEFECTS (Number)		3 CRITICAL DEFECTS (Number)	
	1st step	2nd step	1st step	2nd step	1st step	2nd step
Hair						
Hair Clusters						

*DOUBLE SAMPLING PLAN* – record the first step defects under the first step column. Record the second step defects under the second step column *on the same CP 519* if the second step samples are inspected.

**FOURTH** – Total the tallies in each square. **CIRCLE THE TOTALS.**

# EXPLANATION 6 (9) STATIONARY LOT SAMPLING PLANS

## Recording the Defects

### EXAMPLE - STAINS

Oil, Stains or Grease: Per Sample Unit:

Less than 2 inches in greatest dimension - - - - - Minor

2 inches or more in greatest dimension - - - - - Major

NOTE: Any drops or streaks of oil or grease on the ten-  
dinous part of the hock area will be scored as a minor defect.

FIRST — Fill out the top of CP 519 — AQL Score Sheet

SECOND — Evaluate each stain according to the CARCASS DEFECT CRITERIA  
chart (above).

Example — Carcass unit #1 — no stains; carcass unit #2 — three stains less than  
an inch in diameter = 3 minor defects; carcass unit #3 — no stains; carcass unit  
#4 — one 3 inch stain = 1 major defect; and so on.

THIRD — Tally each stain on the score sheet.

DEFECTS	1 MINOR DEFECTS (Number)		2 MAJOR DEFECTS (Number)		3 CRITICAL DEFECTS (Number)	
	1st step	2nd step	1st step	2nd step	1st step	2nd step
Scurf or Dirt						
Stains and Grease (Specify) <i>Stains</i>	''' ③		' ①			

FOURTH — Total the tallies in each square. Circle the totals:

(A common error at this point is recording "1st step" minor defects in the "2nd step" minor defects column.)



# EXPLANATION 7 STATIONARY LOT SAMPLING PLANS

## Totaling the Defects

- ① Add all the minor defects together and record in Total box.
- ② Add all the major defects together and record in Total box.
- ③ Add all the critical defects together and record in Total box.
- ① + ② + ③ Add the numbers of defects in each TOTAL NUMBER

DEFECTS box together and record in TOTAL NUMBER ALL DEFECTS box. Circle all totals.

DEFECTS	1 MINOR DEFECTS (Number)		2 MAJOR DEFECTS (Number)		3 CRITICAL DEFECTS (Number)	
	1st step	2nd step	1st step	2nd step	1st step	2nd step
Feces						
Ingesta						
Other (Specify)						
TOTAL NUMBER DEFECTS	①		②		③	
TOTAL NUMBER ALL DEFECTS (Minors + Majors + Critical)	①+②+③=→					

REMARKS:

NOTE: When single sampling plan is used, record defects in 1st step column.

Don't forget to sign the form!

(SIGNATURE OF INSPECTOR)

# **EXPLANATION 8 (1) STATIONARY LOT SAMPLING PLANS**

## **Interpreting the Totals and Determining the Action**

### **ACCEPT-REJECT (AC-RE) CRITERIA**

On the basis of the defects found on carcass inspection, the lot is either accepted or rejected. The number (how many), the nature (what kind), and the amount (how much) of each defect are considered in the defect criteria.

The accept and reject numbers for each class of defect in each lot size were derived from thousands of "bits" of computerized data. Research has shown that if the number of defects found in the sample units falls within all "accept" limits, then the lot tends to be clean, reflecting sanitary dressing procedures. If the numbers of defects fall in any of the "reject" zones, the sanitary dressing procedures usually could be improved. The inspection results are a good indicator of the quality of the plant's slaughter procedures, and can be used to pinpoint the location on the kill floor at which the dressing errors are occurring.

# EXPLANATION 8 (2) STATIONARY LOT SAMPLING PLANS

## BEEF CARCASS INSPECTION STATIONARY LOT SAMPLING PLANS

Lot Size (Sides)	Plan	Sample Size (Sides)	Critical		Major		Total	
			Ac	Re	Ac	Re	Ac	Re
100 or less	Single	3	1	2	4	5	12	13
100 - 250	Double							
	Step 1	4	0	3	3	7	12	17
	Step 2	3						
	Total	7	2	3	8	9	24	25
251 - 500	Double							
	Step 1	7	1	5	4	10	18	28
	Step 2	7						
	Total	14	4	5	14	15	45	46
501 and up	Double							
	Step 1	10	1	6	6	13	26	37
	Step 2	12						
	Total	22	6	7	21	22	68	69

### Single Sampling Plan

If the numbers of defects in *all* classes (Critical, Major, and Total) are *equal to or less than* the numbers in *all* "Ac" columns, then ACCEPT THE LOT.

If the numbers of defects in *any one* class (or more) are *equal to or more than* the numbers in the "Re" columns, then REJECT THE LOT.

1 - LOT SIZE — 70 sides	Defects	INTERPRETATION from chart
CRITICAL DEFECTS .....	0 .....	ACCEPT ( 1 or less)
MAJOR DEFECTS .....	2 .....	ACCEPT ( 4 or less)
TOTAL DEFECTS .....	10 .....	ACCEPT (12 or less)

ACTION — ACCEPT THE LOT

- - - *all* totals fell within "accept" limits.

# EXPLANATION 8 (3) STATIONARY LOT SAMPLING PLANS

2 - LOT SIZE — 40 sides

Defects

INTERPRETATION from chart

CRITICAL DEFECTS ----- 0 ----- ACCEPT ( 1 or less)  
 MAJOR DEFECTS ----- 3 ----- ACCEPT ( 4 or less)  
 TOTAL DEFECTS ----- 16 ----- REJECT (13 or more)

**ACTION — REJECT THE LOT**

- - - one total fell in the "reject" zone.

3 - LOT SIZE — 80 sides

Defects

INTERPRETATION from chart

CRITICAL DEFECTS ----- 4 ----- REJECT ( 2 or more)  
 MAJOR DEFECTS ----- 1 ----- ACCEPT ( 4 or less)  
 TOTAL DEFECTS ----- 22 ----- REJECT (13 or more)

**ACTION — REJECT THE LOT**

- - - two totals fell in the "reject" zone.

## Single Sampling Plan

Record the action on the CP 519 — AQL Score Sheet.

FORM CP-519 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS		ESTABLISHMENT NO.		DATE	
<b>AQL SCORE SHEET</b>							
PRODUCT	PRODUCT CODE	LOT NO.	LOT SIZE	SAMPLING PLAN DOUBLE 1st step 2nd step 1 <input type="checkbox"/> 2 <input type="checkbox"/>		SINGLE 3 <input checked="" type="checkbox"/> 3	
REINSPECTION OF A REJECTED LOT 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		BOXED PRODUCT 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		LOT ACCEPTED 1 <input type="checkbox"/> 2 <input type="checkbox"/>		LOT REJECTED 1 <input type="checkbox"/> 2 <input type="checkbox"/>	
DEFECTS		1 MINOR DEFECTS (Number)		2 MAJOR DEFECTS (Number)		3 CRITICAL DEFECTS (Number)	
		1st step	2nd step	1st step	2nd step	1st step	2nd step

# EXPLANATION 8 (4) STATIONARY LOT SAMPLING PLANS

## Double Sampling Plan - Step 1

In this plan, only the number of sample units indicated by the DOUBLE — STEP 1 — line on the Sampling Plan chart have been inspected so far. The defects found in this initial portion of the total sample have been recorded and totaled on the CP 519 — AQL Score Sheet.

Use the STATIONARY LOT SAMPLING PLANS chart on this page to locate the accept and reject numbers for the Double Plan, Step 1 for each class (Critical, Major, and Total) in each lot size in the examples on the next page.

BEEF CARCASS INSPECTION  
STATIONARY LOT SAMPLING PLAN

Lot Size (Sides)	Plan	Sample Size (Sides)	Critical		Major		Total	
			Ac	Re	Ac	Re	Ac	Re
100 or less	Single	3	1	2	4	5	12	13
101 - 250	Double							
	Step 1	4	0	3	3	7	12	17
	Step 2	3						
	Total	7	2	3	8	9	24	25
251 - 500	Double							
	Step 1	7	1	5	4	10	18	28
	Step 2	7						
	Total	14	4	5	14	15	45	46
501 and up	Double							
	Step 1	10	1	6	6	13	26	37
	Step 2	12						
	Total	22	6	7	21	22	68	69

# EXPLANATION 8-5

## Double Sampling Plan - Step 1

If the numbers of defects in *all* classes are *equal to or less than* the numbers in *all* "Ac" columns then ACCEPT THE LOT. DO NOT EXAMINE THE REST OF THE SAMPLE UNITS.

If the numbers of defects in *any one* class (or more) are *equal to or more than* the numbers in the "Re" columns then REJECT THE LOT. DO NOT EXAMINE THE REST OF THE SAMPLE UNITS.

If the lot is not accepted or rejected by the first two interpretations, (one or more of the numbers of defects falls in between the "Ac" limits and the "Re" zones, while the others are within "Ac" limits) then EXAMINE THE REST OF THE SAMPLE UNITS IN STEP 2.

### EXAMPLES — DOUBLE SAMPLING PLAN — STEP 1

1 - LOT SIZE — 350 sides	Defects	INTERPRETATION from chart
CRITICAL DEFECTS .....	0 .....	ACCEPT (1 or less)
MAJOR DEFECTS .....	7 .....	IN BETWEEN (4 and 10)
TOTAL DEFECTS .....	48 .....	REJECT (28 or more)

#### ACTION — REJECT THE LOT

--- one total fell in the "reject" zone.

2 - LOT SIZE — 600 sides	Defects	INTERPRETATION from chart
CRITICAL DEFECTS .....	0 .....	ACCEPT (1 or less)
MAJOR DEFECTS .....	9 .....	IN BETWEEN (6 and 13)
TOTAL DEFECTS .....	15 .....	ACCEPT (26 or less)

#### ACTION — EXAMINE THE REST OF THE SAMPLE UNITS IN STEP 2.

--- one total was in between the "Ac" and "Re" numbers and the other two totals were within "Ac" limits.

# EXPLANATION 8-6

## Double Sampling Plan - Step 2

The Double-Step 2 line on the Sampling Plan chart indicates the number of sample units to be reinspected if the second step is necessary. These sample units should have been selected, identified and placed on the inspection rail with the Step 1 units.

The number of defects in each class found on the Step 2 sample units **MUST BE ADDED** to the corresponding totals for each class from the Step 1 sample units. The sums are the new totals, and are interpreted according to the accept and reject numbers in the total line of the Sampling Plan chart. Locate the total accept and reject numbers for each class in each lot size on the Sampling Plan chart on page 2 of this Explanation.

### EXAMPLES — DOUBLE SAMPLING PLAN — STEP 2

#### 1 - LOT SIZE — 380 Units

	STEP 1	STEP 2	TOTAL	INTERPRETATION
CRITICAL DEFECTS	--- 1	----- 3	----- 4	ACCEPT ( 4 or less)
MAJOR DEFECTS	----- 7	----- 5	----- 12	ACCEPT (14 or less)
TOTAL DEFECTS	----- 15	----- 21	----- 36	ACCEPT (45 or less)

ACTION — ACCEPT THE LOT

#### 2 - LOT SIZE — 600 Units

	STEP 1	STEP 2	TOTAL	INTERPRETATION
CRITICAL DEFECTS	--- 3	----- 2	----- 5	ACCEPT ( 6 or less)
MAJOR DEFECTS	----- 9	----- 12	----- 21	ACCEPT (21 or less)
TOTAL DEFECTS	----- 31	----- 28	----- 59	ACCEPT (68 or less)

ACTION — ACCEPT THE LOT



# EXPLANATION 8-6

## Double Sampling Plan - Step 2

Indicate the action on the CP 519 – AQL SCORE SHEET

### Examples

(Using a lot size between 251 and 500 units.)

#### LOT ACCEPTED ON THE 2ND STEP

FORM CP-S19 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS		ESTABLISHMENT NO.		DATE	
<b>AQL SCORE SHEET</b>							
PRODUCT	PRODUCT CODE	LOT NO.	LOT SIZE	SAMPLING PLAN DOUBLE 1st step 2nd step 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>		SAMPLE SIZE 7/14	
REINSPECTION OF A REJECTED LOT 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		BOXED PRODUCT 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		LOT ACCEPTED 1 <input checked="" type="checkbox"/>		LOT REJECTED 2 <input type="checkbox"/>	

#### LOT REJECTED ON THE 2ND STEP

FORM CP-S19 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS		ESTABLISHMENT NO.		DATE	
<b>AQL SCORE SHEET</b>							
PRODUCT	PRODUCT CODE	LOT NO.	LOT SIZE	SAMPLING PLAN DOUBLE 1st step 2nd step 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>		SAMPLE SIZE 7/14	
REINSPECTION OF A REJECTED LOT 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		BOXED PRODUCT 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		LOT ACCEPTED 1 <input type="checkbox"/>		LOT REJECTED 2 <input checked="" type="checkbox"/>	

#### LOT ACCEPTED ON THE 1ST STEP

FORM CP-S19 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS		ESTABLISHMENT NO.		DATE	
<b>AQL SCORE SHEET</b>							
PRODUCT	PRODUCT CODE	LOT NO.	LOT SIZE	SAMPLING PLAN DOUBLE 1st step 2nd step 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>		SAMPLE SIZE 7	
REINSPECTION OF A REJECTED LOT 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		BOXED PRODUCT 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		LOT ACCEPTED 1 <input checked="" type="checkbox"/>		LOT REJECTED 2 <input type="checkbox"/>	

#### LOT REJECTED ON THE 1ST STEP

FORM CP-S19 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS		ESTABLISHMENT NO.		DATE	
<b>AQL SCORE SHEET</b>							
PRODUCT	PRODUCT CODE	LOT NO.	LOT SIZE	SAMPLING PLAN DOUBLE 1st step 2nd step 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>		SAMPLE SIZE 7	
REINSPECTION OF A REJECTED LOT 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		BOXED PRODUCT 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		LOT ACCEPTED 1 <input type="checkbox"/>		LOT REJECTED 2 <input checked="" type="checkbox"/>	

# EXPLANATION 9 (1) STATIONARY LOT SAMPLING PLANS

## Recording Score Sheet Data on Analysis Sheet

CP-520 ANALYSIS SHEET summarizes the scoresheet results for one week. An ANALYSIS SHEET should be made out at the beginning of each sampling week and the scoresheet results entered in the appropriate squares each time an inspection is made.

### FIRST FILL OUT THE TOP

FORM CP-520 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS				ESTABLISHMENT NO. ①		CIRCUIT ②	
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS						DATE			
						FROM ③ TO			
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
BEEF CARCASS 001	Lots Accepted								
	Lots Rejected								
YOUNG CHICKEN CARCASS 120	Lots Rej. on Rein.	1 2	1 2	1 2	1 2	1 2	1 2	1 2	
	No. of Carcasses in Rej. Lots								
	Combined No. of Carcasses								

1 ESTABLISHMENT NUMBER

2 REGION

3 DATES FOR THE WEEK COVERED BY THE SHEET (Sunday through Saturday)

(Don't forget to sign at the bottom of the form)



(SIGNATURE OF INSPECTOR)

# EXPLANATION 9 (2) STATIONARY LOT SAMPLING PLANS

## Recording Score Sheet Data on Analysis SHEET

**SECOND** — Check the correct product box.

**THIRD** — Fill in the total number of lots accepted on the day the inspection took place.

**FOURTH** — Fill in the total number of lots rejected on the day the inspection took place.

**FIFTH** — Fill in the number of carcasses in the rejected lots for the day the inspection took place.

**SIXTH** — Fill in the total number of carcasses inspected (accepted and rejected) for the day the inspection took place.

**SEVENTH** — Figure the weekly totals. Add together all the daily totals in each of the above lines and fill in the sums in the TOTAL column to the right of the form.

FORM CP-S20 (2-2-70)		USDA - C&MS CONSUMER PROTECTION PROGRAMS				ESTABLISHMENT NO.		CIRCUIT	
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS						DATE			
						FROM _____ TO _____			
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
<b>BEEF CARCASS</b> ② <input type="text"/> 001 <b>YOUNG CHICKEN CARCASS</b> <input type="text"/> 120	Lots Accepted ③								⑦
	Lots Rejected ④								
	Lots Rej. on Rein.	1	2	1	2	1	2	1	2
	No. of Carcasses in Rej. Lots ⑤								
	Combined No. of Carcasses ⑥								
<b>SWINE CARCASS</b>	Lots Accepted								

# EXPLANATION 9 (3) STATIONARY LOT SAMPLING PLANS

## EXAMPLE - ANALYSIS SHEET

For this week you inspected one lot each day Monday through Friday.

There were 450 sides in each lot.

Tuesday's lot and Wednesday's lot were rejected.

HOW WOULD YOU FILL OUT THE ANALYSIS SHEET BELOW?

FORM CP-520  
(2-2-70)

USDA - C&MS  
CONSUMER PROTECTION PROGRAMS

ESTABLISHMENT NO. **1**  
CIRCUIT **2**  
DATE **3**  
FROM TO

ANALYSIS SHEET FOR CARCASS MEAT AND  
MEAT AND POULTRY BYPRODUCTS

PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
BEEF CARCASS <div>001</div>	Lots Accepted								
	Lots Rejected								
YOUNG CHICKEN CARCASS <div>120</div>	Lots Rej. on Rein.	1	2	1	2	1	2	1	2
	No. of Carcasses in Rej. Lots								
	Combined No. of Carcasses								

Compare your answer with the Analysis Sheet below.

FORM CP-520  
(2-2-70)

USDA - C&MS  
CONSUMER PROTECTION PROGRAMS

ESTABLISHMENT NO. **1**  
CIRCUIT **2**  
DATE **3**  
FROM TO

ANALYSIS SHEET FOR CARCASS MEAT AND  
MEAT AND POULTRY BYPRODUCTS

PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
BEEF CARCASS <div>001</div>	Lots Accepted		1			1	1		3
	Lots Rejected			1	1				2
YOUNG CHICKEN CARCASS <div>120</div>	Lots Rej. on Rein.	1	2	1	2	1	2	1	2
	No. of Carcasses in Rej. Lots			225	225				450
	Combined No. of Carcasses		225	225	225	225	225		1125

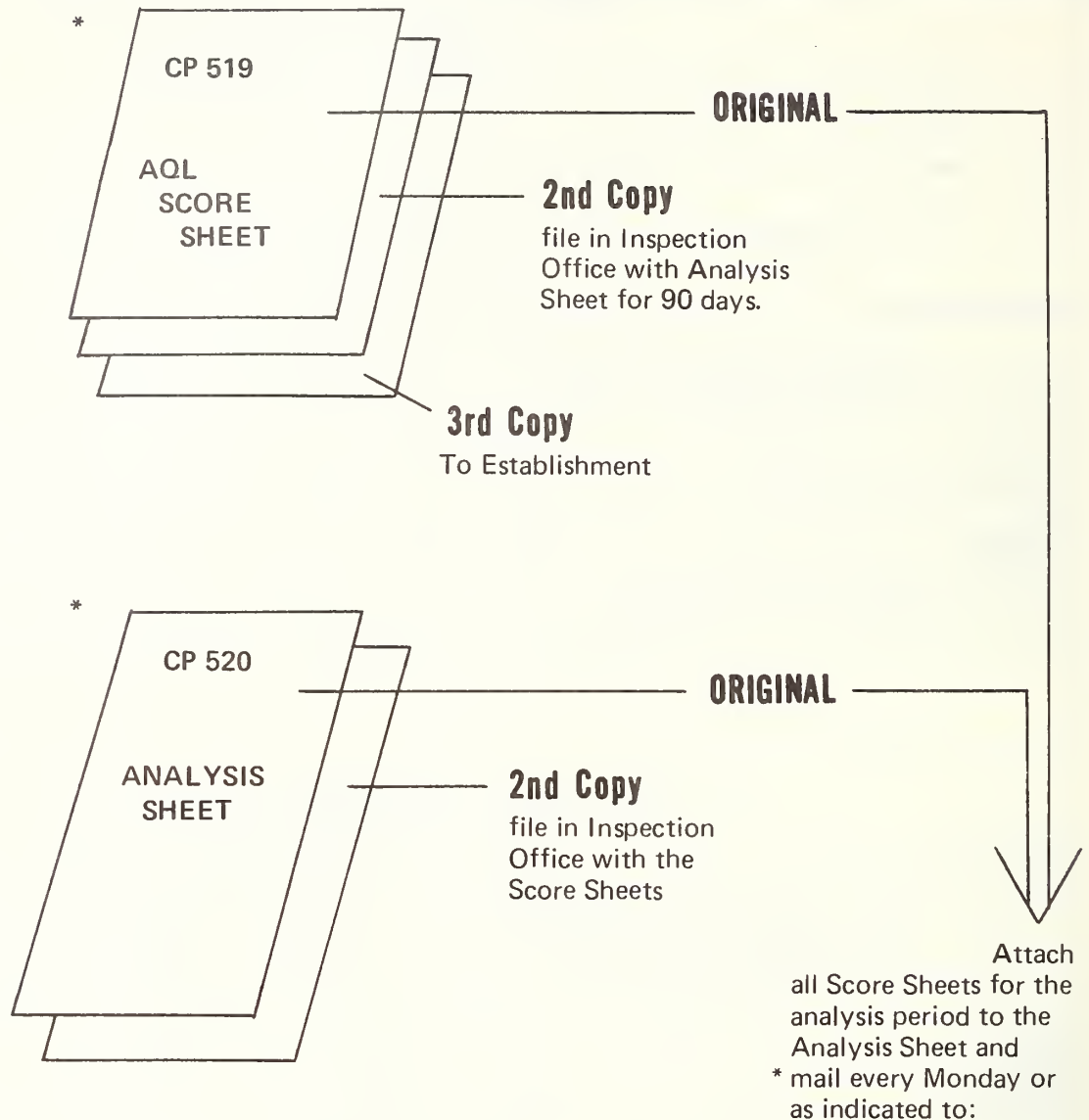
Don't forget!

Carcasses not sides!

Means the sum of the accepted and the rejected carcasses. On Tuesday and Wednesday 225 were rejected and 0 were accepted. Therefore the combined total is  $225 + 0 = 225$ .

# EXPLANATION 10 STATIONARY LOT SAMPLING PLANS

## Distribution of Forms



\* Obtain forms and envelopes through Circuit Offices.

USDA, C&MS, PRU. REC.  
SUPV., ROOM 211  
STOCKYARDS STATION  
4101 SOUTH HALSTED ST.  
CHICAGO, ILLINOIS 60609

# **B- Using the On Line Sampling Plans**

**BEEF CARCASS INSPECTION PROCEDURE CHART**  
**FOR ON LINE SAMPLING PLANS**

1	DETERMINE THE WORKSHIFT	SEE EXPLANATION 1
2	DETERMINE NUMBER OF SAMPLE TIMES REQUIRED	SEE EXPLANATION 2
3	SELECT SAMPLE TIMES	SEE EXPLANATION 3
4	IDENTIFY SAMPLE UNITS & LOTS	SEE EXPLANATION 4
5	INSPECT SAMPLE UNITS	SEE EXPLANATION 5
6	RECORD THE DEFECTS	SEE EXPLANATION 6
7	TOTAL THE DEFECTS	SEE EXPLANATION
8	INTERPRET TOTALS AND DETERMINE ACTION	SEE EXPLANATION 8
9	RECORD SCORE SHEET DATA ON ANALYSIS SHEET	SEE EXPLANATION 9
10	DISTRIBUTION OF FORMS	SEE EXPLANATION 10



# EXPLANATION 1 ON LINE SAMPLING PLANS

## WHAT IS THE WORKSHIFT?

The entire day's kill.

## WHY IS THE WORKSHIFT DEFINED?

The workshift is defined in order to determine —

- a) the starting time-of-day and the ending time-of-day at the kill floor identification point, plus the times-of-day of any regularly scheduled breaks or lunch periods, and
- b) how many half-carass units will be produced during the above time.

These must be known in order to determine how many sample groups to inspect and to be able to use the Random Cards.

## HOW DOES THE WORKSHIFT DIFFER FROM THE LOT?

A workshift is composed of many "lots". Why will be explained later in the procedure.

# EXPLANATION 1 (2) ON LINE SAMPLING PLANS

## DETERMINING THE WORKSHIFT — EXAMPLE.

a) *Times-of-day needed to use the Random Cards.*

1) the time-of-day at which the carcasses first begin to flow past the kill floor sample identification point.—In this example 7:45 AM.

2) the time-of-day at which the carcasses finish flowing past the kill floor sample identification point. In this example — 4:15 PM.

3) the starting and ending times of all regularly scheduled breaks at the sample identification point.

*Morning break — 9:00 AM to 9:15 AM*

*Lunch — 11:15 AM to 11:45 AM*

*Afternoon break — 2:00 PM to 2:15 PM*

b) The number of *sides* produced during the above time. This can be calculated from a steady per hour kill rate, or from the plant's scheduled total kill from the day.

EXAMPLE — total kill time is 7½ hours, and the rate is 30 per hour.

Number of hours	7.5
-----------------	-----

Kill rate per hour	X 30
--------------------	------

Total animals killed	225
----------------------	-----

Each carcass has two sides	X 2
----------------------------	-----

Total number of sides	450
-----------------------	-----

 produced during this workshift. The 450 number is needed

to determine the number of sample groups to select on the ON-LINE SAMPLING PLANS chart.

# EXPLANATION 2 (1) ON LINE SAMPLING PLANS

## DETERMINE THE NUMBER OF SAMPLE TIMES REQUIRED

In this plan 3 sample units are identified and inspected at each preselected time-of-day. (In the STATIONARY LOT SAMPLING PLANS only one sample side is identified at each preselected time-of-day). The 3 sample sides are called a SAMPLE GROUP.

To find the number of sample groups for which to preselect times-of-day from the Random Cards, look in the third column of the ON-LINE SAMPLING PLAN chart labeled "Minimum Number of Sample Groups per Workshift."

ON-LINE SAMPLING PLAN CHART

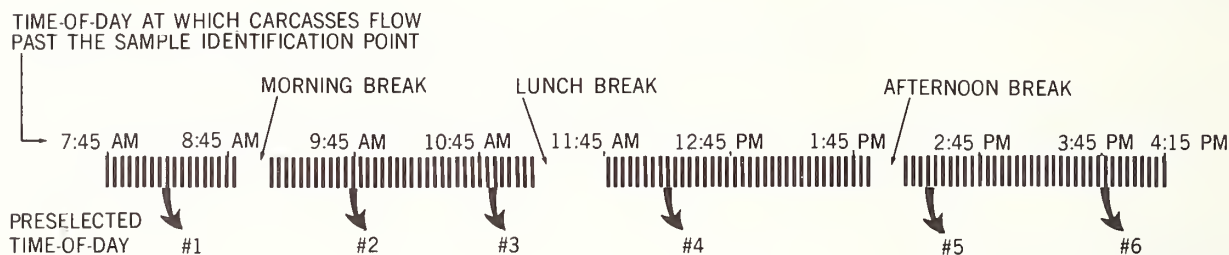
Number of Sides Per Workshift	Sample Size (Sides)	Minimum Number of Sample Groups Per Workshift	Criteria for Each Sample Group					
			Critical		Major		Total	
			Ac	Re	Ac	Re	Ac	Re
100 or less - Use Initial Stationary Plan in lieu of on-line								
101 - 250	3	4 (3 x 4 = 12)						
251 - 500	3	6 (3 x 6 = 18)	2	3	5	6	14	15
501 and up	3	8 (3 x 8 = 24)						

If there were 240 *sides* produced during the workshift, then 4 sample groups of 3 sides each or 12 sample sides would be inspected.

# EXPLANATION 2 (2) ON LINE SAMPLING PLANS

## EXAMPLE

In the following example 450 sides are produced during the workshift. Therefore 6 sample groups would be inspected during the course of the production. The times-of-day at which these 6 sample groups are identified at the kill floor sample identification point are picked at random from the Random Cards. At each preselected random time-of-day three sample sides are identified, each from a different carcass. The production of the sides and the identification of the sample units during the workshift can be diagrammed schematically. See below.



AT EACH PRESELECTED TIME-OF-DAY IDENTIFY 3 SAMPLE SIDES-EACH FROM A DIFFERENT CARCASS.

# EXPLANATION 3 (1) ON LINE SAMPLING PLAN

## SELECTING THE SAMPLE TIMES-OF-DAY

As in the STATIONARY LOT procedure, the ON LINE procedure uses the RANDOM CARDS to preselect the times-of-day at which to identify the sample groups.

For a detailed explanation of the use of the RANDOM CARDS turn to Explanation 3, p. 25, of the STATIONARY LOT SAMPLING PLAN procedure and follow the example.

A specific example using the ON LINE SAMPLING PLAN is marked on a RANDOM CARD on the following page, along with a brief explanation of the steps involved. The workshift is the same as in the previous ON LINE examples.

# EXPLANATION 3 (2) ON LINE SAMPLING PLAN

## The sample RANDOM CARD - with the example marked

### BEEF CARCASS SAMPLING

RANDOM NO.			RANDOM TIMES											
22	31	56	700	801	904	1000	1100	1202	100	202	300	402	502	602
59	54	63	701	807	914	1004	1104	1203	101	202	302	402	504	604
30	26	25	711	810	914	1005	1108	1205	103	204	302	404	505	604
49	67	31	713	812	915	1006	1108	1205	103	209	303	408	507	609
67	47	25	716	824	916	1010	1111	1212	106	209	304	409	513	609
62	27	16												
1	54	35	717	824	923	1011	1111	1213	107	210	309	409	519	612
23	66	52	721	825	928	1012	1112	1214	114	216	312	412	522	614
63	44	43	723	827	929	1015	1113	1218	117	221	316	413	524	616
67	14	27	723	828	929	1021	1116	1219	117	225	320	414	525	617
33	24	50	723	829	930	1021	1116	1221	119	228	320	418	525	628
56	51	1												
16	58	65	725	831	930	1023	1120	1222	120	229	323	424	525	631
10	21	36	730	832	931	1024	1121	1223	121	231	326	425	526	637
26	41	11	730	835	932	1026	1122	1227	123	233	335	427	529	638
37	56	44	735	836	935	1028	1123	1228	125	234	336	431	532	638
55	3	7	737	836	936	1033	1135	1229	126	235	339	432	534	639
31	36	3												
8	57	57	739	837	940	1034	1135	1234	126	237	340	433	535	641
35	39	56	740	838	942	1034	1139	1234	129	238	341	434	538	641
58	48	38	743	840	943	1038	1140	1236	140	240	348	434	540	644
68	59	20	743	846	947	1039	1147	1237	140	242	350	437	545	645
25	8	30	743	846	947	1040	1148	1237	140	244	353	440	545	648
38	60	18												
38	19	50	745	848	949	1042	1149	1238	145	246	354	441	551	648
57	22	35	750	852	955	1044	1152	1243	146	247	356	442	552	649
7	3	19	752	857	958	1050	1156	1248	147	251	356	442	553	650
17	52	34	755	858	958	1051	1156	1249	153	253	357	443	558	650
10	34	38	757	858	959	1052	1158	1254	156	259	359	444	559	652

$$5 + 25 + 22 + 25 + 15 + 25 + 25 + 19 + 25 + 9 = 195$$

The 8 steps for using the RANDOM CARDS

Step 1 Blindly pick a Random Card.

Step 2 Block off all the times-of-day during which carcasses are not flowing past the kill floor identification point.

Step 3 Total the number of times-of-day during which carcasses do flow past the kill floor identification point.

Step 4 Determine the number of sample groups which must be identified on the kill floor - 6 for this example.

Step 5 Figure the SAMPLING INTERVAL  $\frac{195}{6} = 32$  (Drop all fractions).

Step 6 Randomly select a starting point, number must be equal to or less than sampling interval in 5.

Step 7 Select the required number of times-of-day.

Step 8 Eliminate extra sample units, if necessary.

# EXPLANATION 4 (1) ON LINE SAMPLING PLAN

## IDENTIFY THE SAMPLE UNITS AND THE 'LOTS'

Since kill floor layouts and inspector workloads vary from plant to plant, there is no single best way to identify the sample units on the kill floor.

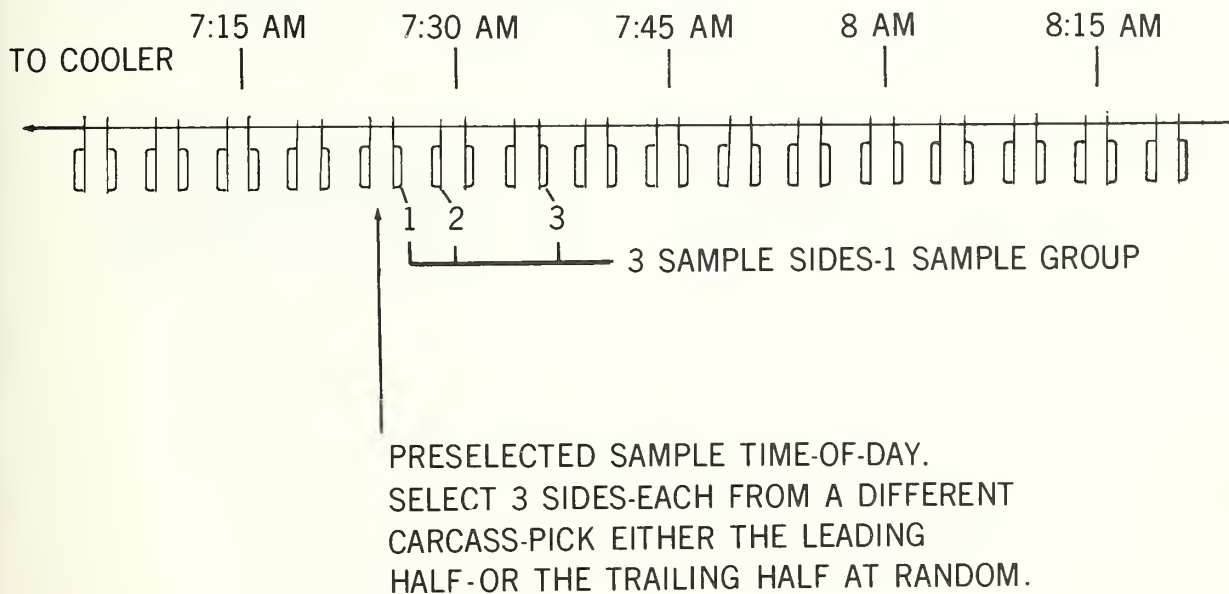
When each sample unit identification time arrives, the designated inspector will identify the carcass closest to the kill floor identification point as a sample.

The preselected random times of day for the actual identification of the specific sample units should be known only by the inspector selecting the samples.

The sample unit identification device should be different from other identification devices used by the plant. It should be placed on the carcass so that it can be easily seen, and should be fastened as securely as possible.

The sample identification point must be located after the final washing of the sides. The sample sides need not be shrouded before inspection, but if they are, the shrouds must be removed at the time of examination

In ON LINE SAMPLING PLANS 3 sample sides are identified at each preselected time-of-day.



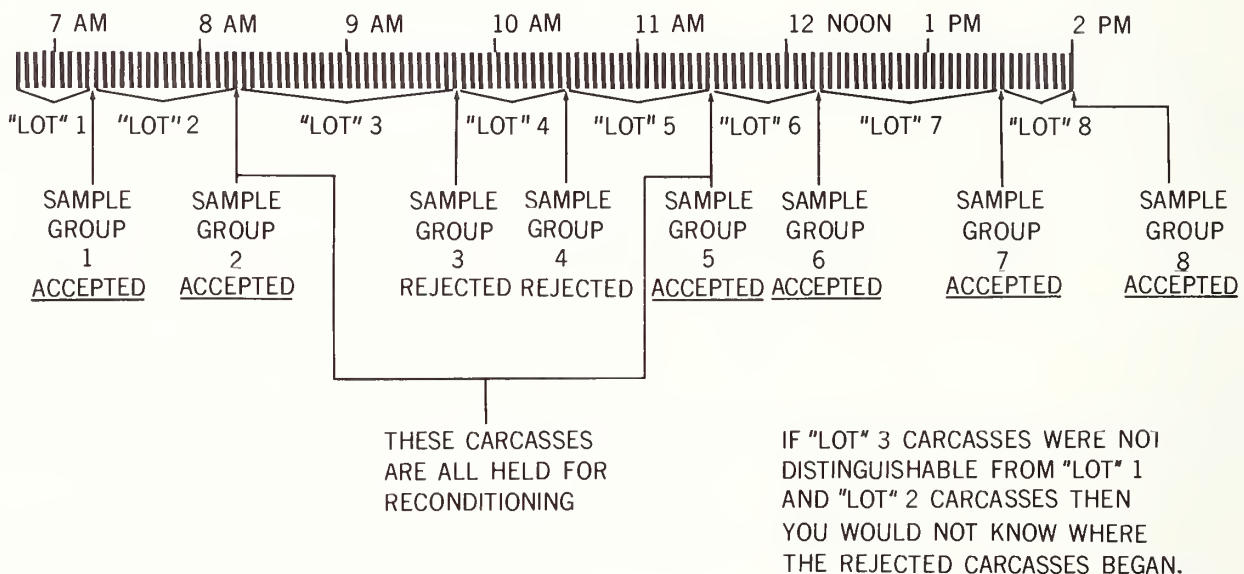


# EXPLANATION 4(2) ON LINE SAMPLING PLAN

## IDENTIFYING THE WORKSHIFT 'LOTS'

Each sample group represents a "lot" of carcasses. If the sample group is accepted then it is assumed that the carcasses between this sample group and the one which preceded it are also acceptable.

Since the sample groups are selected at random there is no way to tell exactly how many carcasses are in this "lot." However, there is no need to know unless the sample group which represents the "lot" is rejected. Then the "lot" needs to have been previously identified to distinguish it from the other "lots" so that it can be reconditioned and inspected. Follow this explanation on the diagram below.



## EXPLANATION 4 (3) ON LINE SAMPLING PLANS

Notice on the diagram that "lot" 5 is included with the rejected carcasses. Since you cannot tell when the carcasses became acceptable during the production of "lot" 5, all are held for reconditioning and inspection.

### Summary. On Line Sampling

1. At each preselected time-of-day identify three sample sides (the sample group), being sure that each sample side is selected from a different carcass.
2. The "lot" of carcasses preceeding each sample group must be identified differently than any other "lot". Any method which accomplishes the purpose of this identification and is acceptable to the Circuit Supervisor may be used.

## EXPLANATION 5 ON LINE SAMPLING PLANS

In this procedure the three sample sides are inspected promptly while still hot.

The inspection area may be any suitable place which is mutually agreeable to both plant management and the Circuit Supervisor. If there is insufficient time or space for the inspection to be conducted on the kill floor, then there may be an empty rail in the cooler or a safe area in a corridor which is suitable.

The inspection routine, as well as the recording and totaling of the defects are similar to those for the SINGLE plan of the STATIONARY LOT SAMPLING PLANS. For details, turn to Explanations 5, 6, and 7 of the STATIONARY LOT SAMPLING PLANS on pages 32 through 45.

The variations in filling out the CP 519-AQL Score Sheet for the On Line procedures are described on the following pages along with examples.

# EXPLANATION 6 (1) ON LINE SAMPLING PLANS

## RECORDING THE DEFECTS

Descriptions of the inspection routine on the sample units, the defect criteria, recording the defects, and totaling the defects are similar to those of the STATIONARY LOT SAMPLING PLANS. See pages 32 through 45 in the STATIONARY LOT SAMPLING PLANS procedure.

When using the ON LINE SAMPLING PLANS, the top of the CP 519 AQL Score Sheet is filled out as follows:

FORM CP-519 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS		ESTABLISHMENT NO. <b>1</b>		DATE <b>2</b>	
<b>AQL SCORE SHEET</b>							
PRODUCT <b>3</b>	PRODUCT CODE <b>4</b>	LOT NO. <b>5</b>	LOT SIZE <b>6</b>	SAMPLING PLAN DOUBLE 1st step 2nd step <b>1</b> <b>2</b>		SINGLE <b>7</b> <b>3</b>	
REINSPECTION OF A REJECTED LOT <b>1</b> YES <b>2</b> NO <b>9</b>		BOXED PRODUCT <b>1</b> YES <b>2</b> NO <b>10</b>		LOT ACCEPTED <b>1</b>		LOT REJECTED <b>2</b>	
DEFECTS		<b>1</b> MINOR DEFECTS (Number)		<b>2</b> MAJOR DEFECTS (Number)		<b>3</b> CRITICAL DEFECTS (Number)	
		1st step	2nd step	1st step	2nd step	1st step	2nd step
Hair							

- 1** Establishment number at which the inspection is conducted.
- 2** Date on which the inspection is conducted.
- 3** Product – BEEF CARCASSES
- 4** Product code – 001
- 5** Lot number
- 6** Lot size - ON LINE SAMPLING PLANS  
– leave this space BLANK. (The exact “lot” size between sample groups is not known.)

## EXPLANATION 6 (2) ON LINE SAMPLING PLANS

### 7 Sampling plan — ON LINE SAMPLING PLANS

— leave this space *BLANK*

(When this space is blank, it indicates to the computer programmers that the On Line Sampling Plan is being used.)

### 8 Sample size — ON LINE SAMPLING PLANS

— enter an encircled 3

SAMPLING PLAN		SAMPLE SIZE
<b>DOUBLE</b>		<b>3</b>
1st step	2nd step	
1 <input type="text"/>	2 <input type="text"/>	
<b>SINGLE</b>		
3 <input type="text"/>		

(The circle around the 3 indicates to the computer programmers that the On Line Sampling Plan is being used rather than the Single plan of the Stationary Lot Sampling Plans.)

The **3** is used on all CP 519's when the On Line Sampling Plans are being used no matter how many carcasses are produced during the workshift because the sample group size is always the same.

*A separate CP 519 is made out for each sample group of three sides.*

*EXAMPLE.* A workshift production of 300 sides would require the selection of six sample groups of three sides each. For each group you would fill in a *separate* CP 519, for a total of *six* CP 519's.

### 9 Inspection of rejected lot — checkmark the appropriate box.

### 10 Boxed product — checkmark the appropriate box.

## **EXPLANATION 6 (3) ON LINE SAMPLING PLANS**

Record all defects in the "1st Step" column.

## **EXPLANATION 7 ON LINE SAMPLING PLANS**

### **TOTALING THE DEFECTS**

The same method is used for both procedures. For details, see EXPLANATION 7 for the STATIONARY LOT SAMPLING PLANS on page 43.

# EXPLANATION 8 (1) ON LINE SAMPLING PLANS

## Interpreting the Totals and Determining the Action

### ACCEPT-REJECT (AC-RE) CRITERIA

On the basis of the defects found on carcass inspection the lot is either accepted or rejected. The number (how many), the nature (what kind), and the amount (how much) of each defect are considered in the defect criteria.

The accept and reject numbers for each class of defect in each lot size were derived from thousands of "bits" of computerized data. Research has shown that if the number of defects found in the sample units falls within all "accept" limits, then the lot tends to be clean, reflecting sanitary dressing procedures. If the numbers of defects fall in any of the "reject" zones, the sanitary dressing procedures usually could be improved. The inspection results are a good indicator of the quality of the plant's slaughter procedures, and can be used to pinpoint the location on the kill floor at which the dressing errors are occurring.



# EXPLANATION 8 (2) ON LINE SAMPLING PLANS

## INTERPRETING THE TOTALS AND DETERMINING ACTION ON LINE SAMPLING PLANS

Number of Sides Per Workshift	Sample Size (Sides)	Minimum Number of Sample Groups Per Workshift	Criteria for Each Sample Group					
			Critical		Major		Total	
			Ac	Re	Ac	Re	Ac	Re
100 or less - Use Initial Stationary Plan in lieu of on-line								
101 - 250	3	4 (3 x 4 = 12)						
251 - 500	3	6 (3 x 6 = 18)	2	3	5	6	14	15
501 and up	3	8 (3 x 8 = 24)						

If the numbers of defects in *all* classes (Critical, Major, and Total) are *equal to or less than* the numbers in *all* "Ac" columns, then ACCEPT THE GROUP.

If the numbers of defects in *any one* class (or more) are *equal to or more than* the numbers in the "Re" columns, then REJECT THE GROUP.

### EXAMPLE

1. GROUP SIZE – 3 SIDES	Defects	INTERPRETATION from Chart
CRITICAL DEFECTS -----	0 -----	ACCEPT ( 2 or less)
MAJOR DEFECTS -----	3 -----	ACCEPT ( 5 or less)
TOTAL DEFECTS -----	11 -----	ACCEPT (14 or less)

ACTION – ACCEPT THE GROUP

- - - *all* totals fell within "accept" limits.

# EXPLANATION 8 (3) ON LINE SAMPLING PLANS

## EXAMPLE

2. GROUP SIZE – 3 SIDES      Defects      INTERPRETATION from Chart

CRITICAL DEFECTS ----- 1 ----- ACCEPT ( 2 or less)

MAJOR DEFECTS ----- 2 ----- ACCEPT ( 5 or less)

TOTAL DEFECTS ----- 17 ----- REJECT (15 or more)

## ACTION – REJECT THE GROUP

--- one total fell in the 'reject' zone.

Now – Record the action on the CP 519 AQL Score Sheet

FORM CP-519 (2-2-70)		USDA - C&MS CONSUMER PROTECTION PROGRAMS		ESTABLISHMENT NO.		DATE	
<b>AQL SCORE SHEET</b>							
PRODUCT	PRODUCT CODE	LOT NO.	LOT SIZE	SAMPLING PLAN DOUBLE      SINGLE 1st step 2nd step 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>		SAMPLE SIZE <b>(3)</b>	
REINSPECTION OF A REJECTED LOT 1 <input type="checkbox"/> YES      2 <input type="checkbox"/> NO		BOXED PRODUCT 1 <input type="checkbox"/> YES      2 <input type="checkbox"/> NO		LOT ACCEPTED 1 <input type="checkbox"/>		LOT REJECTED 2 <input checked="" type="checkbox"/>	
DEFECTS		1 MINOR DEFECTS (Number)		2 MAJOR DEFECTS (Number)		3 CRITICAL DEFECTS (Number)	
		1st step	2nd step	1st step	2nd step	1st step	2nd step

Remember – A *separate* CP 519 AQL Score Sheet *must* be filled out for *each* sample group inspected when using On Line Sampling Plans.

# EXPLANATION 9 (1) ON LINE SAMPLING PLANS

## Recording Score Sheet Data on Analysis Sheet

CP 520 ANALYSIS SHEET summarizes the scoresheet results for one week. An ANALYSIS SHEET should be made out at the beginning of each sampling week and the scoresheet results entered in the appropriate squares each time an inspection is made.

### FIRST FILL OUT THE TOP

FORM CP-520 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS				ESTABLISHMENT NO. ①		CIRCUIT ②	
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS						DATE ③			
						FROM TO			
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
BEEF CARCASS 001	Lots Accepted								
	Lots Rejected								
YOUNG CHICKEN CARCASS 120	Lots Rej. on Rein.	1 2	1 2	1 2	1 2	1 2	1 2	1 2	
	No. of Carcasses in Rej. Lots								
	Combined No. of Carcasses								

- 1 ESTABLISHMENT NUMBER
- 2 REGION
- 3 DATES FOR THE WEEK COVERED BY THE SHEET

(Don't forget to sign at the bottom of the form)

↓  
\_\_\_\_\_  
(SIGNATURE OF INSPECTOR)

# EXPLANATION 9 (2) ON LINE SAMPLING PLANS

## Recording Score Sheet Data on Analysis SHEET

SECOND — Check the correct product box.

THIRD — Fill in the total number of sample groups accepted on the day the inspection took place.

FOURTH — Fill in the total number of sample groups rejected on the day the inspection took place.

FIFTH — Fill in the number of carcasses in the rejected lots for the day the inspection took place.

SIXTH — Fill in the total number of carcasses inspected (accepted and rejected) for the day the inspection took place.

SEVENTH — Figure the weekly totals. Add together all the daily totals in each of the above lines and fill in the sums in the TOTAL column to the right of the form.

FORM CP-520 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS		ESTABLISHMENT NO.		CIRCUIT			
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS				DATE FROM _____ TO _____					
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
<b>BEEF CARCASS</b> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <div style="border: 1px solid black; padding: 2px;">2</div> <div style="border: 1px solid black; padding: 2px; margin-left: 10px;">001</div> </div>	Lots Accepted <b>(3)</b>								<b>(7)</b>
	Lots Rejected <b>(4)</b>								
	Lots Rej. on Rein.	1	2	1	2	1	2	1	2
	No. of Carcasses in Rej. Lots <b>(5)</b>								
	Combined No. of Carcasses <b>(6)</b>								
<b>SWINE CARCASS</b>	Lots Accepted								

# EXPLANATION 9 (3) ON LINE SAMPLING PLANS

## EXAMPLE - CP 520 - ANALYSIS SHEET

Each day, Monday through Friday, has been designated as a workshift.

Daily production is 450 sides. Six sample groups are inspected each day.

All sample groups were accepted for this week *except*:

*Tuesday* - 2 sample groups were rejected.

*Thursday* - 1 sample group was rejected.

When inspecting the rejected lots, you noted that 142 sides were rejected on Tuesday and 96 sides were rejected on Thursday.

HOW WOULD YOU FILL OUT THE ANALYSIS SHEET BELOW?

FORM CP-520 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS				ESTABLISHMENT NO. ①		CIRCUIT ②	
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS						DATE ③			
						FROM _____ TO _____			
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
BEEF CARCASS 001	Lots Accepted								
	Lots Rejected								
YOUNG CHICKEN CARCASS 120	Lots Rej. on Rein.	1	2	1	2	1	2	1	2
	No. of Carcasses in Rej. Lots								
	Combined No. of Carcasses								

Compare your answer with the Analysis Sheet on the next page.

# EXPLANATION 9 (4) ON LINE SAMPLING PLANS

## CP 520 - ANALYSIS SHEET

FORM CP-520 (2-2-70)		USDA-C&MS CONSUMER PROTECTION PROGRAMS				ESTABLISHMENT NO. ①		CIRCUIT ②	
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS						DATE			
						FROM ③ TO			
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
BEEF CARCASS <input checked="" type="checkbox"/> 001	Lots Accepted		6	4	6	5	6		27
	Lots Rejected			2		1			3
YOUNG CHICKEN CARCASS 120	Lots Rej. on Rein.	1 2	1 2	1 2	1 2	1 2	1 2	1 2	
	No. of Carcasses in Rej. Lots			71		48			119
	Combined No. of Carcasses		225	225	225	225	225		1125

Don't  
forget!

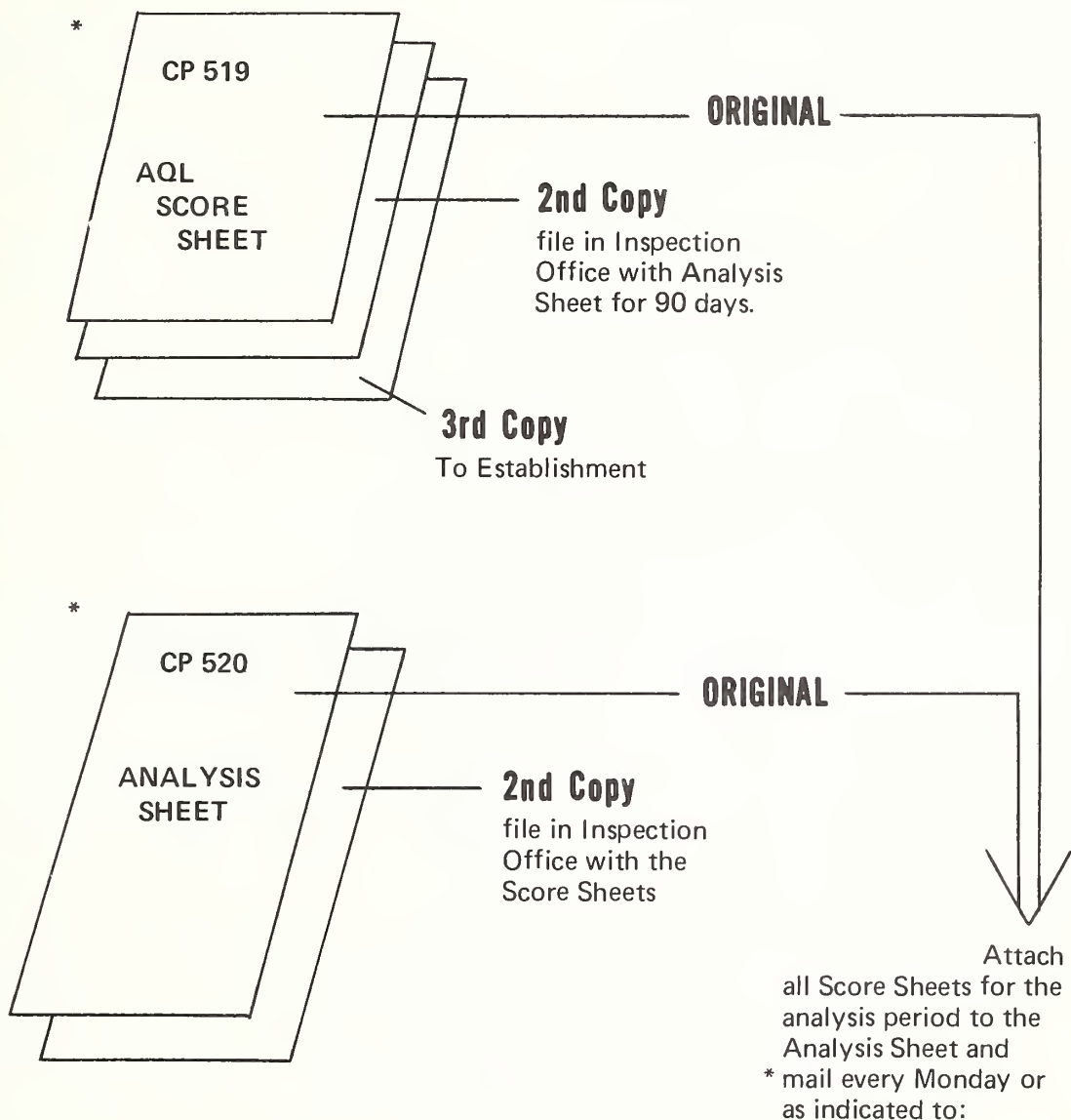
Sum of  
rejected and  
accepted  
carcasses.

Each  
sample  
group  
represents  
a "lot!"

in carcasses,  
not sides!

# EXPLANATION 10 ON LINE SAMPLING PLANS

## Distribution of Forms



\* Obtain forms and envelopes through Circuit Offices.

USDA, C&MS, PRU. REC.  
SUPV., ROOM 211  
STOCKYARDS STATION  
4101 SOUTH HALSTED ST.  
CHICAGO, ILLINOIS 60609



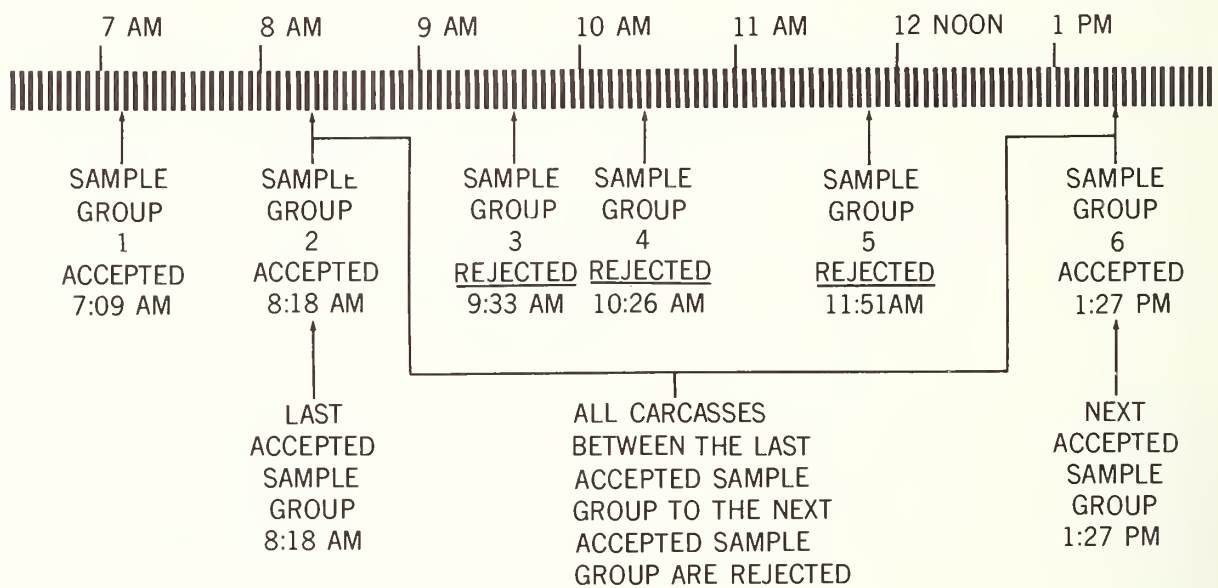
# IV THE INSPECTION OF REJECTED LOTS

When carcasses from the kill floor are rejected by the original inspection, they must be reconditioned, inspected using one of the *Rejected Lot Sampling Plans*, and accepted before they may move freely. The Rejected Lot Sampling Plan selected must be acceptable to plant management and the Circuit Supervisor.\*

*When a sample is rejected, how many carcasses are rejected?*

**STATIONARY LOT SAMPLING PLANS** - The entire lot represented by the rejected samples, including the samples themselves, are rejected.

**ON-LINE SAMPLING PLANS** - All carcasses from the *last accepted sample group* to the *next accepted sample group*, including the sample sides, are rejected. See diagram below.



\*NOTE: Rejected Lot Sampling Plans have different acceptance levels and must be used to determine if a rejected lot has been satisfactorily reconditioned.

*How are the rejected lots identified?*

The identity of the rejected lots may be maintained by any method acceptable to the Circuit Supervisor.

Some methods that have been used are -

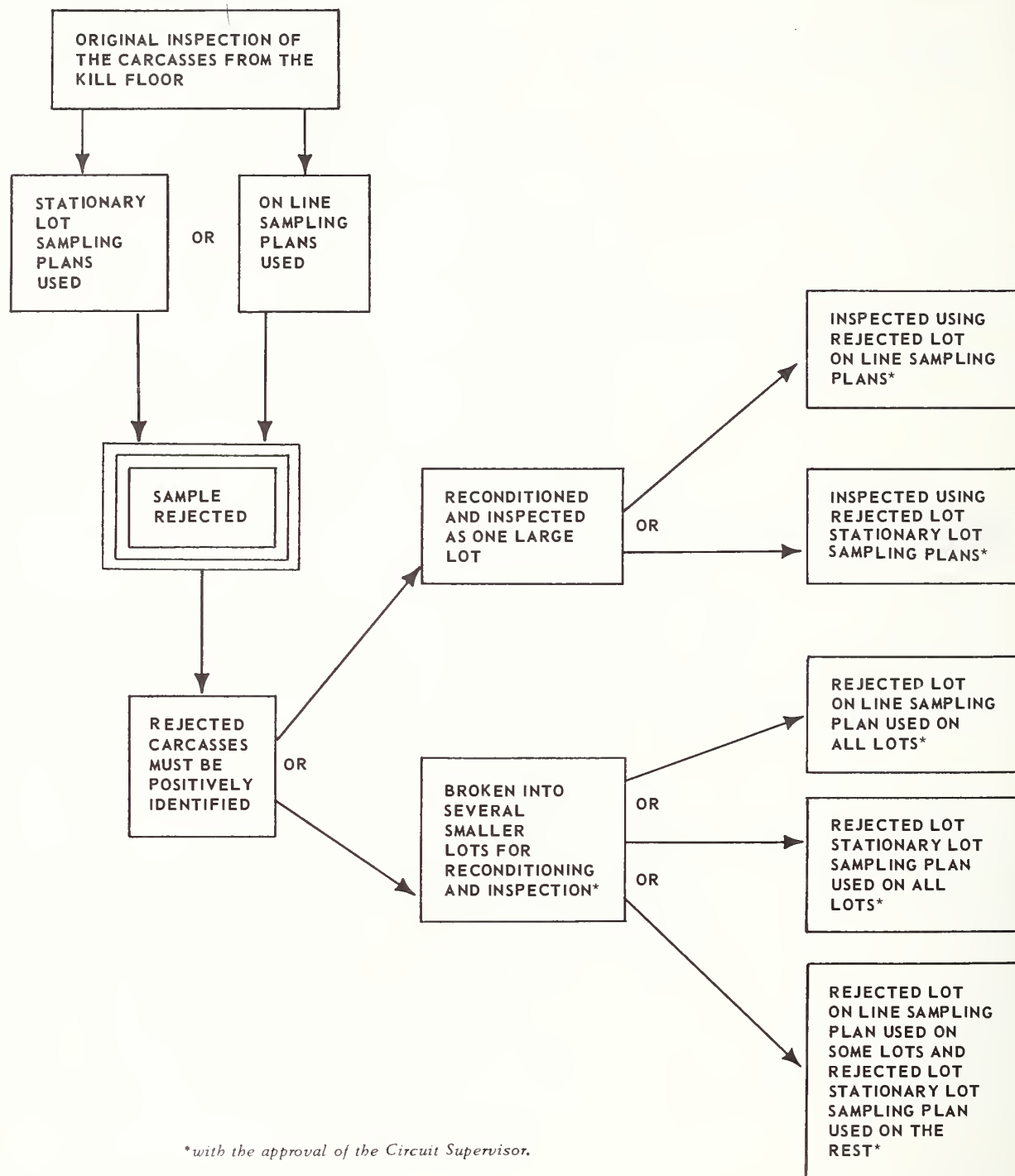
- 1) sequential numbering on weight tags for each rejected carcass.
- 2) different colored tags for each lot.
- 3) code lettering on tags for carcasses in each lot.
- 4) identifying the first and last carcasses in each lot, if the carcasses can be satisfactorily identified by this means.

*How may the rejected carcasses be lotted and inspected?*

The original inspection of the carcasses from the kill floor was accomplished using either the Stationary Lot Sampling Plans or the On Line Sampling Plans. In either case, the rejected carcasses and samples may or may not all be in one location. If they are mixed with accepted carcasses and in several locations in one or more coolers, the rejected carcasses *need not* be assembled together, provided that they are positively identified as being rejected and the whereabouts of all the rejected groups is made known to the inspector.

It may be more convenient for the establishment to break a large number of rejected carcasses into smaller lots for reconditioning. Also, the establishment, depending on its shipping or fabricating schedules, may wish to have some of the rejected lots inspected using Rejected Lot On Line Sampling Plans, and others inspected using Rejected Lot Stationary Lot Sampling Plans. Any combination is acceptable provided it conforms with the sampling procedures and is acceptable to the Circuit Supervisor. The main considerations of the inspection service are positive control of the rejected product, adherence to the random inspection procedures to assure the validity of the results, and availability of inspectors.

# CHART of the POSSIBLE REJECTED LOT INSPECTION COMBINATIONS



*Where may reconditioning and inspection be conducted?*

As long as the operation is conducted in a sanitary manner, there are no special provisions for establishing a reconditioning station. Reconditioning may be done in coolers, passageways, or on the loading dock. The inspection area must have adequate space and facilities to enable the inspector to conduct his examinations of hinds and fores or sides of beef without interference, and an electric outlet for a portable light.

## The Rejected Lot Sampling Plans.

The sampling plan charts to be used on rejected carcasses are titled Rejected Lot Sampling Plans. Both the Rejected Lot Stationary Lot Sampling Plan chart and the Rejected Lot On Line Sampling Plan chart are reproduced below. Note that these plans are different from the initial inspection sampling plans.

### REJECTED LOT STATIONARY LOT SAMPLING PLANS

Lot Size (Sides)	Plan	Sample Size (Sides)	Critical		Major		Total	
			Ac	Re	Ac	Re	Ac	Re
100 or less	Single	3	0	1	3	4	10	11
101 - 250	Double							
	Step 1	4	0	2	2	5	10	15
	Step 2	3						
	Total	7	1	2	6	7	21	22
251 - 500	Double							
	Step 1	7	0	3	3	8	15	25
	Step 2	7						
	Total	14	2	3	11	12	36	37
501 and up	Double							
	Step 1	10	0	4	4	10	20	31
	Step 2	12						
	Total	22	3	4	15	16	54	55

### REJECTED LOT ON-LINE SAMPLING PLAN

Number of Sides Per Workshift	Sample Size (Sides)	Minimum Number of Sample Groups Per Workshift	Criteria for Each Sample Group					
			Critical		Major		Total	
			Ac	Re	Ac	Re	Ac	Re
100 or less - Use Initial Stationary Plan in lieu of on-line								
101 - 250	3	4 (3 x 4 = 12)						
251 - 500	3	6 (3 x 6 = 18)	2	3	5	6	14	15
501 and up	3	8 (3 x 8 = 24)						

These Rejected Lot plans are used in the same manner as the sampling plans for the original inspection.

A. REJECTED LOT STATIONARY LOT SAMPLING PLANS

The rejected carcasses may be in one location or in several locations in one or more coolers. They need not be assembled together in order to be inspected as one lot, provided the arrangements made for lotting and inspection are acceptable to the Circuit Supervisor.

1) The lot size is the number of half-carcass units agreed upon by the plant management and the Circuit Supervisor.

2) Select the required number of sample units at random, being sure to preselect enough sample sides to perform the second step if needed.

3) Inspect the samples.

4) Record and total the results on the CP 519 - AQL Score Sheet. (Remember to mark "yes" in the "Reinspection of Rejected Lot" box).

5) If the sample is accepted the lot is free to move. IF THE SAMPLE IS REJECTED - The lot must be reconditioned and inspected until it passes. At this point the twice-rejected carcasses may be re-lotted with the approval of the Circuit Supervisor.

6. Record the results on the CP 520 - Analysis Sheet. To fill out this form you must keep track of how many times the lot has been rejected. Follow the explanation on the sample form below.

FORM CP-520 (2-2-70)		USDA - C&MS CONSUMER PROTECTION PROGRAMS				ESTABLISHMENT NO.		CIRCUIT	
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS						DATE			
						FROM _____ TO _____			
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
<b>BEEF CARCASS</b> <input checked="" type="checkbox"/> 001 <b>YOUNG CHICKEN CARCASS</b> <input type="checkbox"/> 120	Lots Accepted								
	Lots Rejected								
	Lots Rej. on Rein. ①	② 1	2 1	2 1	2 1	2 1	2 1	2 1	④
	No. of Carcasses in Rej. Lots								
	Combined No. of Carcasses								

- ① Use the "Lots Rej. on Rein." row to record lots which have been reconditioned and inspected after being rejected from the inspection of the original samples from the kill floor.
- ② Use the half-space marked #1 to record the number of lots of originally rejected carcasses which were accepted after the *first* reconditioning and inspection.
- ③ Use the half-space marked #2 to record the number of lots of originally rejected carcasses which had to be reconditioned and inspected *2 or more times* before they passed. To be able to determine how many times that any particular lot has been reconditioned and inspected, you should mark this information on the CP-519 AQL Score Sheet.
- ④ The total is the *sum* of the numbers in *all* the half-boxes, both the half-boxes marked #1 and the half-boxes marked #2.



When filling out the CP-519 AQL Score sheet, and the CP 520 - Analysis Sheet, think to yourself . . .  
“How many times have these carcasses been *reconditioned by the plant* before being accepted on inspection?”

If the answer is “*only once*” - they were rejected by the original kill floor sample but accepted after the *first* reconditioning and inspection— *then record this lot in the half-space marked #1.*

If the answer is “*two or more times*” -they were rejected by the original kill floor sample then had to be reconditioned and inspected two or more times before being accepted— *then record this lot in the half-space marked #2.*

Try working the following example. It includes most of the situations which are likely to occur using Rejected Lot Stationary Lot Sampling Plans.

The original lot size is 450 sides. One lot per day is produced by the plant. All inspections use the Stationary Lot procedures.

*Monday* - the original lot passed.

*Tuesday* - the original lot failed.

*Wednesday* - the original lot passed.

- the lot rejected yesterday was divided into 3 smaller lots and all were reconditioned and inspected. Two of the smaller lots passed and one failed again.

Thursday - the original lot failed.

- the one smaller lot which failed again yesterday was reconditioned and inspected today. It passed.

Friday - the original lot passed.

- the lot rejected yesterday was divided into two smaller lots. Both were reconditioned and inspected and both passed

FORM CP-520 (2-2-70)		USDA - C&MS CONSUMER PROTECTION PROGRAMS				ESTABLISHMENT NO.		CIRCUIT	
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS						DATE FROM _____ TO _____			
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
BEEF CARCASS <input type="checkbox"/> 001	Lots Accepted								
	Lots Rejected								
YOUNG CHICKEN CARCASS <input type="checkbox"/> 120	Lots Rej. on Rein.	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
	No. of Carcasses in Rej. Lots								
	Combined No. of Carcasses								

Compare your answer below.

FORM CP-520 (2-2-70)		USDA - C&MS CONSUMER PROTECTION PROGRAMS				ESTABLISHMENT NO.		CIRCUIT	
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS						DATE FROM _____ TO _____			
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
BEEF CARCASS <input checked="" type="checkbox"/> 001	Lots Accepted		1		1		1		3
	Lots Rejected			1		1			2
YOUNG CHICKEN CARCASS <input type="checkbox"/> 120	Lots Rej. on Rein.	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
	No. of Carcasses in Rej. Lots			225		225			450
	Combined No. of Carcasses		225	225	225	225	225		1125

These lots were reconditioned once by the plant before they were accepted.

This lot had to be reconditioned twice by the plant before it was accepted.

## B. REJECTED LOT ON-LINE SAMPLING PLANS.

The rejected carcasses may be in one location or in several locations in one or more coolers. They need not be assembled together in order to be inspected as one lot, provided the arrangements made for lotting and reinspection are acceptable to the Circuit Supervisor.

1) Figure the workshift. The workshift is

a) the estimated time that it will take the establishment employees to recondition the carcasses. The starting time-of-day and the ending time-of-day need to be estimated, plus the times-of-day of any regularly scheduled breaks, in order to use the Random Cards.

b) the number of rejected sides to be reconditioned during the above time. This information is needed to determine from the Rejected Lot On-Line Sampling Plans chart how many sample groups (and therefore sample times-of-day) to preselect.

2) As the reconditioning progresses, identify the sample groups at the preselected times-of-day.

3) Inspect the sample sides promptly.

4) Record and total the defects on CP 519 - AQL Score Sheet.

Use a separate Score Sheet for each sample group. (Do not forget to mark "yes" in the "Reinspection of a Rejected Lot" box)

5. If the sample group is accepted, then all the carcasses which preceded it in the reconditioning process (the "lot" that the sample group represents) are free to move:

*If the sample group is rejected, identify all carcasses that remain in the plant from the rejected lot. The inspector in charge will determine how many of these must be reconditioned before another group sample is taken. When a sample has been selected, inspected, and accepted, the line may move freely again. As an alternative, the remainder of the rejected lot may be subotted and inspected by a stationary lot sampling plan.*

*Follow the explanation in the example below.*

This lot failed its original inspection based on the samples identified on the kill floor (either Stationary Lot or On-Line.)

The rejected carcasses are now being reconditioned by the plant and inspected according to the Rejected Lot On-Line Sampling Plans.

Sample group #1 - inspected at 8:03 a.m., passed.

Sample group #2 - inspected at 8:54 a.m., passed.

Sample group #3 - inspected at 9:27 a.m., *Failed* - - -

(This is the *second time* that these carcasses have failed an inspection. The first time was the original inspection.)

All carcasses that remain in the plant from the rejected lot must be identified. The inspector in charge will determine how many must be reconditioned before another group will be selected. The reconditioning must be completed, resampling and inspection must be performed and if the group is accepted, on-line reconditioning may again continue.

6. Record the results on the CP 520, Analysis Sheet. To fill out this form you must keep track of how many times the carcasses have been rejected. Follow the explanation on the sample form.

**ANALYSIS SHEET FOR CARCASS MEAT AND  
MEAT AND POULTRY BYPRODUCTS**

DATE

FROM \_\_\_\_\_ TO \_\_\_\_\_

PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
<b>BEEF CARCASS</b> <input checked="" type="checkbox"/> 001 <b>YOUNG CHICKEN CARCASS</b> <input type="checkbox"/> 120	Lots Accepted								
	Lots Rejected								
	Lots Rej. on Rein. ①	1 ② 2	1 2	1 2	1 2	1 2	1 2	1 2	④
	No. of Carcasses in Rej. Lots	③							
	Combined No. of Carcasses								

- ① Use the "Lots Rej. on Rein." row to record sample groups representing workshift carcasses which have been reconditioned and inspected after being rejected by the inspection of the original samples from the kill floor.
- ② Use the half-space marked #1 to record the number of sample groups representing carcasses which were accepted after the *first* reconditioning and inspection using Rejected Lot On-Line procedures.
- ③ Use the half-space marked #2 to record the number of lots representing carcasses which had to be reconditioned and inspected two or more times before they passed. (Note that this number is in *lots*.)
- ④ The total is the *sum* of the numbers in *all* the half-boxes, both the half-boxes marked #1 and the half-boxes marked #2.

When filling out the CP 519 AQL Score Sheet and the CP 520 Analysis Sheet, think to yourself - - - -

“How many times have these carcasses been reconditioned by the plant before being accepted on inspection?”

If the answer is “*only once*” - they were rejected by the original kill floor sample but accepted after the *first* reconditioning and inspection - *then record these sample groups in the half-space marked #1.*

If the answer is “*two or more times*” - they were rejected by the original kill floor sample then had to be reconditioned and inspected two or more times before being accepted - *then record this lot in the half-space marked #2.*

Try working the following example. It includes most of the situations that are likely to occur when the Rejected Lot On Line Sampling Plans are used.

At this plant there is one workshift per day and 450 *sides* of beef produced during that workshift.

*Monday*

*kill floor production* - 4 sample groups were accepted and 2 sample groups were rejected.

### *Tuesday*

*kill floor production* - all 6 sample groups were accepted *yesterdays rejected carcasses* - 138 sides were reconditioned using the Rejected Lot On Line sampling procedure, and all 4 sample groups were accepted.

### *Wednesday*

*kill floor production* - 2 sample groups passed and 4 sample groups failed. The rejected carcasses were divided into *two* workshifts of 146 sides each. One workshift was reconditioned and inspected this afternoon and all 4 sample groups passed. The other workshift of 146 sides was held for reconditioning tomorrow.

### *Thursday*

*kill floor production* - was sampled using the Stationary Lot procedure. The entire day's production was one lot and it passed on inspection late this afternoon.

*yesterdays rejected carcasses* - the remaining workshift of 146 sides was reconditioned and inspected this morning. The first 2 sample groups passed but the 3rd sample group failed and the rejected carcasses were held for tomorrow.

### *Friday*

*kill floor production* - the plant went back to On-Line sampling and all 6 sample groups were accepted.



Friday - continued.-

yesterdays rejected carcasses - the 104 sides were reconditioned and inspected using the Rejected Lot Stationary Lot sampling plan. They passed.

Picture the events

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
KILL FLOOR PRODUCTION	450 SIDES 4 S.G. ACC 2 S.G.-REJ	450 SIDES 6 S.G. ACC	450 SIDES 2 S.G. ACC 4 S.G. REJ	450 SIDES 1-LOT-ACC	450 SIDES 6 S.G. ACC
RECONDITIONED ONCE		138 SIDES 4 S.G. ACC	146 SIDES 4 S.G. ACC	146 SIDES 2 S.G. ACC REMAINDER -REJ	
RECONDITIONED TWICE					104 SIDES 1-LOT-ACC

How would you fill out the Form CP 520 - Analysis Sheet?

FORM CP-520 (2-2-70)		USDA - C&MS CONSUMER PROTECTION PROGRAMS				ESTABLISHMENT NO.		CIRCUIT	
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS						DATE			
						FROM _____ TO _____			
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
<b>BEEF CARCASS</b> <input checked="" type="checkbox"/> 001 <b>YOUNG CHICKEN CARCASS</b> <input type="checkbox"/> 120	Lots Accepted								
	Lots Rejected								
	Lots Rej. on Rein.	1	2	1	2	1	2	1	2
	No. of Carcasses in Rej. Lots								
	Combined No. of Carcasses								

Compare your answer - - - - -.

FORM CP-520 (2-2-70)		USDA - C&MS CONSUMER PROTECTION PROGRAMS				ESTABLISHMENT NO.		CIRCUIT	
ANALYSIS SHEET FOR CARCASS MEAT AND MEAT AND POULTRY BYPRODUCTS						DATE			
						FROM _____ TO _____			
PRODUCT	LOT INFORMATION	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.	TOTAL
BEEF CARCASS <input checked="" type="checkbox"/> 001	Lots Accepted		4	6	2	1	6		19
	Lots Rejected		2		4				6
YOUNG CHICKEN CARCASS <input type="checkbox"/> 120	Lots Rej. on Rein.	1 2	1 2	1 4 2	1 4 2	1 2 2	1 2 1	1 2	11
	No. of Carcasses in Rej. Lots		69		146				215
	Combined No. of Carcasses		225	225	225	225	225		1125





